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*The American Books*

# THE FEDERAL RESERVE

*A Study of the Banking System of the United States*

BY  
HENRY PARKER WILLIS

*Secretary of the Federal Reserve Board*



WITH AN INTRODUCTION

BY  
CHARLES S. HAMLIN,  
*Governor of the Federal Reserve Board*

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TO WHOM  
THEY BELONG

## INTRODUCTION

IT IS of great importance that the American people should understand fully not only the text of the Federal Reserve Act, but, as well, its history during the process of enactment, and I am sure that this book will be read with the deepest pleasure by all who are interested in the subject of banking. The Federal Reserve Act has already been, and will be in the future, of the greatest advantage, not alone to the bankers, but to all our people who are the customers of the banks, and who are engaged in agriculture, commerce, and industrial pursuits. The author points out that so far as expressions of opinion are to be found in the book, they are expressions merely of his personal views, but such expressions are surely entitled to have great weight. I feel confident that this book, both as a history and a searching analysis of the Act, will be an invaluable help to every student of banking and finance.

CHARLES S. HAMLIN.





## BIOGRAPHICAL NOTE

HENRY PARKER WILLIS was born in 1874 of New England parents, who moved to Racine, Wisconsin, when he was four years of age. He lived in Racine until seventeen years old when he entered Western Reserve University at Cleveland. He entered the University of Chicago a year later and received the degree of B. A. in 1894.

The University of Chicago appointed Mr. Willis graduate scholar; then Fellow; and then Armour-Crane Travelling Fellow in Political Economy. He studied at Berlin and Vienna, then returned to this country and received the degree of Ph.D. from the University of Chicago in 1898.

From 1897 to 1898 Mr. Willis served as special assistant to the Indianapolis Monetary Commission; 1898-1901 he was adjunct professor and professor of Economics and Politics at Washington and Lee University. In 1901 he went to New York as editorial writer for the New York *Evening Post*; then was sent to Wash-

ington as correspondent for the New York *Journal of Commerce* and the Springfield *Republican*. He returned to Washington and Lee University to organize the School of Commerce there. In 1906 he resumed work as Washington correspondent of the *Journal of Commerce*, and at the same time joined the staff of George Washington University as Professor of Finance, and (in 1910) became Dean of the College of Political Science in that institution. In 1912 he moved to New York as Associate Editor of the *Journal of Commerce*, being at the same time a member of the staff of Columbia University.

Mr. Willis was appointed as expert by the House Ways and Means Committee in 1912 and 1913 during the preparation of the Underwood Tariff. He became expert to the House Banking and Currency Committee when work was begun on the Federal Reserve Act and continued as such until the passage of the Act. In 1914 he was expert to the Joint Committee of Senate and House on Rural Credits, and was appointed Secretary of the Federal Reserve Board in September, 1914.

Mr. Willis was for some years American correspondent for the London *Economist*. He

is the author of books on "Principles and Problems of Banking," "Principles of Accounting," etc., and monographs on tariff and financial questions.



## PREFACE

IN THIS book I have, in accordance with the invitation of the editor of the series in which it appears, attempted to furnish a brief outline of the Federal Reserve Act and the operation of its principal provisions. That such an outline might be intelligible, it was necessary to include a brief introductory discussion of banking conditions in the United States, and a short sketch of the history of the demand for banking legislation, as well as of the reasons which ultimately dictated action. Within the space at my disposal it is not possible to afford more than the barest outline of either of these topics, or, in the later chapters of the book, to offer anything save general descriptions and analyses of the principal points involved in the Act.

In thus outlining the main aspects of the subject, I have, however, sought to provide a connected account which could be easily followed by a reader without technical banking knowledge, and who desired only so much

information regarding the subject as would put him in touch with the principal aspects of the banking situation as changed by the Federal Reserve Act. Deeply appreciating the limitations upon the treatment imposed by the conditions of space and methods of analysis, I have nevertheless endeavored to present the facts dealt with as accurately and in as succinct and connected a manner as possible.

✓ The Federal Reserve System is in its early stages of development. (There is still a widespread failure to understand its real nature, and some tendency to make banking questions a subject of political controversy.) In the hope that a comprehensible account of a great constructive statute may enable the general reader to form a correct opinion of it, and so to determine his attitude toward it in the future, as well as to furnish him with a true idea of the system of banking under which his business affairs are carried on, the following pages have been written.

H. P. W.

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# **THE FEDERAL RESERVE**



## CHAPTER I

### BANKING IN THE UNITED STATES

IN THE United States to-day ~~three~~ distinct systems of banking may be distinguished:

(1) The national banking system organized under Federal law.

(2) The commercial banking system organized under the laws of the several States.

(3) The system of special institutions organized under State laws, and including trust companies, savings banks, building loan associations, and various others.

It will be noted that the foregoing classification is based upon the legal foundation underlying the banking situation. A different classification which might be employed would recognize merely the following:

(1) Commercial banking, including both national and State institutions, and among the latter, in certain cases, trust companies which have specialized along commercial lines.

(2) Non-commercial or investment institu-

#### 4. The Federal Reserve

tions, including some State banks, many trust companies, practically all savings banks and building loan associations.

There are other classifications and sub-classifications that might be adopted for various purposes, but the two thus sketched are the most important to the present treatment, and are those which will chiefly figure in the following discussions.

Of all the banks in the United States, the earliest are the State banks organized in the older commonwealths—those on the Atlantic seaboard. In some of these commonwealths there are institutions enjoying special charters which run back to the colonial period. In most of the States, however, there now exist general banking laws under which any person who complies with specified requirements can organize a bank. Wherever special charters prevail it is often found that many broad powers are granted in them, some dating from a time when the business of banking was not clearly differentiated from other occupations. Wherever general banking laws exist, as they do to-day in most of the States, it will be found that careful descriptions, limitations, and requirements enter into the several banking acts, the object

being to define the classes of business in which the various institutions whose incorporation is permitted may legally engage. In all States where such statutes exist there is some provision for very careful public oversight and inspection of the accounts, books, cash, and securities of the several banks. (Banking, then, under whatever laws conducted, and in whatever way it may be specialized, is everywhere regarded as a quasi-public occupation, and as demanding the general oversight and participation of the public authorities.)

But what is banking? Many writers define a bank as an institution which exercises the functions of discount, deposit, and issue—a classification which yields very little insight because of the fact that such a grouping of functions is merely a way of describing banking as an operation from different points of view. What the bank does is the same under each of these heads—there is no difference in its essential performance. Reduced to its lowest terms, this essential function is that of guaranteeing the credit of individuals. The basic banking transaction may be described as follows:

A has purchased goods from B, and has given B a document or “note,” in which he promises

to pay B the sum of \$1,000 with interest at the end of ninety days. We may assume that this payment is absolutely certain, and that there is no risk of loss. B, however, wishes to get means of payment immediately in order to meet his own obligations. In order to do this, he resorts to some one who has immediate funds, and asks him to extend "accommodation." If the man who aids him, thus called in, is simply a money lender, he purchases the note of B either with or without B's guarantee or endorsement; that is, he gives B the amount agreed upon, and takes the note. Thus B gets the funds he needs, and the money lender, C, gets an investment for ninety days. If the agency called on is not a money lender but a "bank," the banker takes the note from B, and B gets in exchange the right to draw upon the bank at sight up to an amount agreed upon. This process is called discount, and the difference between the amount that B can draw at sight, and the face of the note, is the discount for this transaction. The banker seldom, if ever, enters into such a transaction without having B's endorsement or guarantee on the note, but it is plain that what has been done is to substitute the credit of the bank for the

credit of A and B. The banker counts upon not being asked to pay money for the drafts drawn on him by B. That is to say, he expects that not every one to whom B gives a draft or check on him will want to cash it, or, if such cashing should be demanded, that other checks and drafts will come into his possession sufficient to offset those which he is thus asked to make good.

This hope is founded upon the fact that the banker accepts the funds on deposit. He allows persons who want to have their money safely kept to leave it with him, and this affords them a convenience because they can now pay by means of checks. When he makes a discount he may, and usually does, in the United States, make it by merely crediting the person to whom it is granted with a fixed sum, allowing that person to draw on it to the amount indicated. It is clear that this "deposit" function is the same as the discount function, except insofar as the deposits with the banker consist of money. Where they are created simply through crediting a customer with a specified amount, the deposit function is merely another aspect of the discount function. Neither function could be carried on without the other.



It may be that the customer of the bank would rather not receive the credit on the books of the institution because the persons with whom he deals do not understand the check system, or have no facilities for cashing checks. Should that be true, the customer will probably ask to receive his discount in currency. If the banker is allowed to exercise the issue function, he will then merely hand the person to whom he has granted the discount a quantity of "bank notes." They are notes which he agrees to pay at sight if presented. In this phase of the operation the banker has merely taken the note from B and given in exchange a quantity of his (the banker's own) notes in small denominations. The banker now has A's note endorsed by B for \$1,000 for ninety days, while B, having paid, say \$10 for the service, has, say, ninety-nine of the banker's notes of ten-dollar denomination payable to bearer. The question may be asked why B did not simply issue his own notes, numbering one hundred, of denominations of \$10, and pay them to any one who desired him to settle his obligation. There is no reason why he might not have done so except that the banker's credit is better known than his, and that the banker specifically undertakes to pay

his own notes in money when they are presented. It is quite true that in most cases the holder of such a note will not present it for payment; but one principal reason why he does not do so is that he knows he can, if he chooses, liquidate in that way at any time. Performance of the operation just referred to over and over again, and proper protection of the bank's notes and deposits issued or granted so that the holder may get cash at sight, is commercial banking. The banker may modify the plan of his business by entering into an agreement with his customers to pay them not at sight, but on time; and in that case he is able to use such funds as come to him for long-time investments. The basic idea is the same in the one case as in the other, but the method of procedure is different.

The national banking system is a system of commercial banks, and the same is true of many of the State systems. Trust companies are institutions which frequently do a large commercial banking business, but which undertake a variety of additional functions that have nothing to do with banking, such as those of serving as executor, trustee, and the like, acting as administrator, registering stocks and

in the form of national currency. This was believed likely to have the double advantage of creating a demand for Government bonds, and of unifying the currency. The State banks accepted national charters so slowly, however, and so few new national banks were organized, that Congress, shortly after the close of the Civil War, imposed a tax of 10 per cent. upon State bank notes. This practically limited the issue of currency to national banks, and the system expanded rapidly. State banks were still able to go on exercising banking functions through the deposit side of their activities, crediting borrowers with the loans they received in the form of deposits, and allowing State to draw checks thereon. The national small of course, could do business in this way, United addition they could also issue notes, as get good a steady regular growth during the War of 1861-5 system, until to-day it a plan for another Bank with a combined was put forward, and the institution. The chartered in 1816, with a twenty-year period. The Second Bank of the United States held the Government deposits and acted as Fiscal Agent. It was an efficient institution, but it incurred the enmity of those in charge of the

stitutions together, the number is probably not less than 20,000, while the combined capital of all is over \$1,100,000,000, capital and surplus being over \$2,400,000,000. It is thus seen that the national banks are neither numerically nor in point of capital in the majority; but they have always had a disproportionate importance by reason of the fact that they were united under Federal oversight, uniform in their methods for the most part, commercial in their type of business, relatively strong in their reserve requirements, and better protected than most other institutions. This does not imply that there are not many State institutions fully the equal of national banks, but is a general remark applying to the different systems taken in the aggregate. Under the national system, and in most of the States, entrance to the banking business is free—that is to say, a specified number of persons complying with certain requirements can take out a charter and begin business. They do not need a special act of the legislature or of Congress. If the institution thus organized is a national bank, it can, by depositing national bonds with the Government, unquestionably issue currency. In other words, access to the privilege of currency issue

is open to all who are willing to comply with the necessary requirements.

The banking system whose main outline has thus been drawn is practically unique. In most foreign countries banks have been much more highly centralized. Two types of banking may be noted outside the United States. In the one there is a large central institution which usually has a close connection with the Government, holds Government funds, and issues currency on a monopoly basis. Such banks ordinarily have branches varying in number. Around them are developed subordinate institutions which engage in a more varied type of banking operations. These usually keep a substantial part of their funds with the central bank, and the latter is thus able, by reason of its control of note issue and its holdings of reserves, to regulate the flow of money into and out of the country, and to affect the prevailing rate of interest to a certain extent. With divers variations this is the type of banking that is found in England, France, and Germany. The other of the two types of banking is seen in Canada, where twenty-seven different institutions, many of them of large resources, exist side by side, and operate under special charter.

Several of them possess many hundreds of branches, each and all exercising the functions of note issue, while all protect the notes of each by contributing to a joint guaranty fund, upon which the notes of any failed bank become at once a lien. It will be observed that, both under the Canadian and European systems of banking, the branch system is widely employed, which accounts for the centralization of the system of banking. (In the United States branch banking has been practically prohibited ever since the inauguration of the national banking system, either as a result of law or of conditions and customs equivalent thereto.

Upon the banking system thus organized has now been superimposed the Federal reserve banking system; or, rather, it is perhaps more accurate to say that the banking units thus described are in process of being reorganized into a coherent whole through the operation of the Federal reserve system.) Exactly how this process is being carried out must now be described in some detail.

We have seen that some 25,000 different banks are scattered over the United States, none of them having any open or overt connection with any other. (The Federal reserve system endeav-

ors to organize these banks into a single system, and, at the same time, to localize the control of that system. In order to accomplish this end, it divides the country into a certain number of districts, each of which is supposed to be self-controlling and democratic in its methods. In each of these districts every national bank is required to become a member of a corporation known as a Federal reserve bank. It is obliged to take out stock in this Federal reserve bank to an amount equal to 6 per cent. of its capital and surplus, one half being paid up, and the other constituting a liability of the bank taking stock. While every national bank must thus become a member of and stockholder in the Federal reserve bank of its own district, the State, private, and savings banks of the district are permitted to become members if they choose. Since they are organized under State and local laws, the Government of the United States has no direct jurisdiction over them; it can merely permit them to do certain things, encouraging or discouraging given lines of banking policy on their part. These banks, if they choose, may take out stock in Federal reserve banks, and may thereupon place themselves upon an exact equality with the national banks

which are required by law to become members and stockholders of the Federal reserve banks. If the banks, both national and State, in any given district, should take out stock in the Federal reserve bank, it is evident that there would thus be established a joint or coöperative institution practically uniting the banks of the community or region. If not all should join, or if the membership in the institution should be confined to the national banks, the Federal reserve bank would still possess the same general coöperative qualities, although it would not be so inclusive as would otherwise be the case.

Whether more or less inclusive, the Federal reserve bank acts as a medium of communication and joint means of assistance to the banks that are members of it. It holds the reserve, deposits of the member banks up to a specified amount, and it deals only with such banks. That is to say, it takes the funds of its member banks and uses them wherever circumstances demand for the purpose of accommodating other member banks who may stand in need of relief or additional funds.

The Federal reserve bank may go out into the open market and purchase paper from individuals or corporations in the event that it



does not obtain from its own members sufficient discount business to enable it to pay its expenses and to make its own rates effective when necessary. Whatever line of policy it may pursue, however, it, under the terms of the Federal Reserve Act, as will later be shown, must keep its cash invested in very short-time paper—that is to say, it makes no long investments, and endeavors to discount and liquidate only that paper which is of exceptional quality and responsibility, and which grows out of commercial, agricultural, and industrial transactions. This restriction of the business of Federal reserve banks is not due to a belief that no other kind of paper can be considered “good,” but is due to the recognition that only those classes of paper will liquidate themselves—that is to say, will automatically afford a settlement means in the course of the natural processes of trade.

The Federal reserve bank of the district represents not only the interests of banks that are stockholders in it, but also those of the public as represented by three Government directors designated by the Federal Reserve Board, and of the business community as represented by three business men chosen by the member banks

in the same way that they select their own banking representatives.

The Federal reserve banks as a whole are under the oversight and direction of the Federal Reserve Board in Washington, a body appointed by the President, and whose duty it is to oversee the operations of the reserve banks, harmonize them, and generally operate the system as a unit. The Federal Reserve Act does not describe the functions of the Federal Reserve Board in this way, but gives a lengthy and detailed account of its powers and duties. In effect, these, when reduced to simple form, amount merely to what has just been stated. Every Federal reserve bank is presumed to be self-governing or autonomous, and independent of any other; but the Board is given power to call upon any Federal reserve bank to rediscount the paper of another whenever circumstances seem to require it. In cases where no such intervention is necessary, but where one Federal reserve bank desires to get funds from another which stands ready to advance them, the Board simply exercises the function of fixing the rate at which such inter-bank accommodation shall be extended.

From this brief sketch of the Federal reserve

system it will be seen that it is an association of banks to which all national institutions must adhere, and in which all, whether national or State, may be members, for the purpose of uniting the reserves of the multitudinous small banks of the country into a very small number of combined reserves, such reserves to be used primarily for the purpose of equalizing the strength of the banking community by aiding those members of it which are weak or which require aid in the extension of their business along legitimate and desirable lines..

To this it should be added that the Federal reserve banks are by law vested with what would ultimately amount to a monopoly of the power of issuing notes. At present national banks exercise this function, while State banks, trust companies, etc., do not. But under the Federal Reserve Act national banks will gradually find it to their interest to surrender the note-issue power, and that function will consequently pass into the hands of the Federal reserve banks, to be by them exercised as they deem best in response to the request of the member banks, which, in turn, will be controlled and actuated by the applications of the public for note currency.

The Federal Reserve Act has in many ways modified the National Bank Act, in some respects profoundly, but it has not changed its structure, or altered the basis of banking in the United States. It leaves that as it was before, and seeks simply to organize the existing banks into units effective for regular work in quiet times and for relief in times of emergency. It is not a change in the banking system in the broad and true sense of that word, but is an evolution and further development of it. It applies the teachings and experience of foreign countries to American conditions by introducing the principles of centralization or combination of reserves, and of joint control and protection of the issue function. At the same time it maintains free banking, the essentially American element in bank operation, so that any group or individual possessed of a limited amount of capital and holdings, by meeting certain easily attained requirements, can organize a bank, gain admission to the Federal reserve system, and thereby become party to and sharer in the operations of the joint organization already described. It is a notable fact that the Federal Reserve Act, in making provision for the election of directors of Federal reserve banks, gives

to each and every bank, whether small or large, equality of voting power with every other, so that the institution of \$25,000 capital has exactly as much influence in the selection of directors to represent its interests in the Federal reserve bank of the district as does the city institution possessed of many millions of capital.

In times past one of the greatest difficulties of the national banking system has been in its inadequacy at moments of panic or disaster. Banks which had funds on deposit with others under such conditions would invariably withdraw them, thus weakening the reserves of the larger banks, and oftentimes piling up funds to no purpose in the vaults of the smaller. Individuals doubtful of the solvency of the institution with which they were dealing, although without good grounds for such doubts, have acted likewise, withdrawing their deposits from the institution where they were being kept. The consequence has been weakness at the very time when strength was needed, and lack of coöperation at the moment when coöperation was a necessity. From this system it has developed that bank loans were usually contracted in times of panic, notwithstanding that at that very moment they should have been

enlarged, and in European countries were actually enlarged in that way. The Federal Reserve Act provides against such a condition by permitting large issues of notes, and also by requiring each member bank to keep a specified amount of deposits with its Federal reserve bank, whether it chooses to do so or not. The Federal Reserve Board is given qualified power to suspend reserve requirements, and by these means the law endeavors to make the whole banking chain as strong as its strongest link—always assuming, of course, that each bank's assets are sound and good, and that the strain upon it is merely a strain due to desire for liquidation. No banking mechanism can protect banks whose assets are rotten; neither is it possible for any mechanism wholly to overcome panic. All it can do is to eliminate unnecessary basis for panic, and to so organize and consolidate the strength of the financial community as to enable it to meet panic conditions firmly and without loss. All this the Federal reserve system enables its member banks to accomplish, and thus it is in position to extend indirect aid even to non-member banks, because the latter are affected by the general conditions of the financial community precisely as

member banks are. (The Federal reserve system is, however, not simply an insurance against panic, but a regular working part of the banking mechanism of the country with given functions to be steadily and continuously performed, and a definite part to play in the continuous development of banking.)

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## CHAPTER II

### HISTORY OF BANKING REFORM MOVEMENT

DEFICIENCIES in the national banking system were perceived comparatively early in its history, but did not make themselves felt in a way so serious as to enlist active effort for their correction until about twenty-five years after the system had first become operative. Moreover, during this period of twenty-five years, the difficulties which were most seriously felt were not those that afterward caused most annoyance and led to most active effort for improvement. Probably the first inconvenience that was experienced in the management of the national circulation after the national banking system had been definitely created and the Act had been amended to meet the earlier requirements of the conditions then existing, was the prospect that the supply of Government bonds, available at prices that would enable the banks to put out circulation based thereon, would be



insufficient. In 1880-83 this problem had become acute, due to the fact that the twenty-year bonds which had been issued by the Federal Government during the Civil War at 5 and 6 per cent. interest were expiring, and the question what should be done in connection with them was unsettled. This problem was disposed of by refunding the bonds for another twenty years, and thus enabling the national banks to get the securities they needed as a basis for their circulation. With the growth of the great surpluses of revenue during the decade 1880-90, a new type of problem appeared; for the purchases of bonds made by the Treasury Department, in order thus to use up the surplus, had again brought the bonds to a premium and made it questionable whether the maintenance of the circulation on a satisfactory basis providing for the issue of enough of the notes would be feasible. Discussion of the question was, however, only sporadic. The national system was proving itself in so many ways better adapted to the needs of the country than the system of banking which had preceded it, that comparatively few persons were disposed to attack it seriously.

A new situation developed after 1890. The

difficulty in getting an adequate supply of circulating notes had been making itself more and more felt prior to that time, and when the panic of 1893 came on, this phase of the problem became suddenly very acute. During the panic of 1893 there was a tremendous shortage of currency, and many expedients had to be resorted to for the purpose of supplying even the bare necessities of the country for a circulating medium. Not only clearing-house certificates, but a great variety of forms of local obligations which served as currency substitutes, were injected into the circulation from time to time, and served as a means of relieving the strain upon national bank notes. As for the national bank notes themselves, it was almost out of the question to obtain sufficient amounts of them. Even when a national bank had deposited its bonds with the Treasury and had made application for notes, fully three weeks were necessary in order to get delivery of the final completed currency. This delay was necessary in order that the notes might be printed, dried, and shipped to their destination. The process of signing them and putting them out required more time. Altogether, the delay involved in making the currency available was

so great that the experience of the panic convinced practically all observers of the unsatisfactory nature of the prevailing system for issuing notes as a practical matter, entirely independent of the question whether the method of note issue provided in the National Act was or was not theoretically satisfactory or desirable.

The result of these events was to draw the attention of American bankers toward the practice of other countries. Many persons believed that the past experience of the United States with so-called central banking as exemplified in the history of the First and Second Banks of the United States had been such as practically to put resort to such expedients out of the question. This belief directed attention most strongly to the Canadian banking system which had been lately revised, and in which the most striking feature, from the standpoint of American bankers, was an issue of currency protected by a joint guaranty fund contributed by all of the banks. At a meeting of the American Bankers' Association in 1893, at Baltimore, a plan of a somewhat similar sort was advocated. This was designated as the "Baltimore Plan," and became to many minds synonymous with what has long been called "Currency Re-

## History of Banking Reform Movement 29

form." Unsatisfactory conditions in the currency situation had their share in contributing to the growth of the silver agitation, but the presidential campaign of 1896 turned almost entirely about the question of remonetizing silver. Discussion of banking and currency, as distinct from that relating to the standard of value for money, practically disappeared in the struggle over silver. Immediately after the election of President McKinley, however, an effort was made by business men and bankers throughout the country to direct attention once more toward the question of an appropriate note issue. Legislative leaders, nevertheless, showed almost complete indifference to the whole subject, and the "currency reform" movement after 1896, therefore, naturally became an effort to secure definite gold-standard legislation and only incidentally improvement of the banking situation.

The most notable movement of the four years from 1896 to 1900 was that embodied in what was called the Indianapolis Currency Commission. This was a body appointed by a convention of boards of trade and commercial organizations generally, which had met at Indianapolis, Indiana. The Commission did

its work largely in Washington, and ultimately issued a report which called for three principal changes in existing legislation: (1) The definite establishment of the gold standard; (2) the separation of the gold fund protecting greenbacks or United States notes in the Treasury Department from the other funds of the Treasury, with provision for reconstituting this fund by the issue of bonds; and (3) the issue of bank notes based upon commercial paper and duly protected in various ways. It is probable that this report would have evoked immediate action by Congress to some effect had not the Spanish-American War intervened. The close of the war found the United States approaching another presidential election. Congressional leaders then hastily framed a measure known as the Gold Standard Law of 1900, which became a statute on March 14th of that year. In this Gold Standard Law provision was made for the segregation of the funds of the Treasury, so that \$150,000,000 should always be available behind the greenbacks, and authority was given to the Secretary of the Treasury to sell bonds for the purpose of reestablishing this fund if at any time it should fall below the level thus arbitrarily fixed for it. The Act declared the


standard of money in the United States to be the gold dollar, although it was defective in making no provision for the redemption of the silver dollar in gold or for the issue of bonds to maintain parity. Outstanding bonds were to be refunded into 2 per cent. consols, and these 2 per cent. bonds were made available to protect national bank currency. Prior to 1900, \$50,000 had been the minimum capitalization of a national bank, but the new Act reduced this sum to \$25,000 in towns of 3,000 inhabitants. This reduction and the issue of the 2 per cent. bonds were expected to enable country communities to organize national banks and take out the currency they needed. The fact that prior to 1900 the outstanding bonds had brought a large premium, while banks could obtain only 90 per cent. of the par value of their bonds in currency, had made it unprofitable for the banks to issue. For example, if a bank had to pay for \$100,000 of Government bonds, say, 112, while it could get only \$90,000 in currency, there would be a gap of \$22,000 between the currency and the amount invested in bonds, on which the bank was likely to suffer loss. Shrinkage in bond premiums and the fact that this amount of money was not definitely employed in any

way, except for the interest on the face of the bonds, made the issue unsatisfactory to the banks. Therefore, the new law allowed the banks to get 100 per cent. of the face of their bonds in notes. The Act of 1900 made, however, no provision whatever for notes based on commercial paper, nor did it render the prompt issue of the notes any easier than before. It was, nevertheless, successful in stimulating the organization of national banks, and the number in existence rapidly increased, especially in the group with \$25,000 capital. The outstanding bonds were rapidly converted into the new 2 per cent. bonds, and these were taken up by the new banks. The small banks, especially, were disposed to take out circulation up to the level allowed by law, and became strong buyers of 2 per cent. bonds.

Under the Act of 1900 the needs of the country for currency were more or less fully met. Business was prosperous, and there was a general expansion of operations and of prices. The Act of 1900 had not, however, met any of the real requirements of banking and currency reform. Although the previous prosperity and the apparent remoteness of panic had led to a slackening of interest on the part of many com-

mercial and business interests which had previously urged banking reform, scientific students of the situation did not reduce their efforts, and nearly every year a succession of new bills made their appearance in Congress. The striking feature of this second period of agitation may be said to be the recognition of the fact that a mere reform in note currency issue methods would not meet the needs of the case. Both the experience of foreign countries and of the United States, as well as closer analysis of the contemporary experience of Canada, showed that such was the fact, and emphasized the necessity for a more thorough and far-reaching type of legislation than had yet been afforded.

Charles N. Fowler, who had become Chairman of the Banking and Currency Committee in the House of Representatives in the year 1901, was a strong advocate of a genuine elastic currency provision. He introduced a succession of bills dealing with the subject, and in the course of his investigation was speedily led to the conviction that what was needed most was coöperation among the banks, not only for note issues, but also for the control of credit in such a way as to prevent hasty expansion that would occur were reserves lowered to a





danger point. Working toward this thought through a succession of later measures, Mr. Fowler ultimately framed in the year 1910 a measure entitled "A Bill to Establish a Complete Financial and Banking System." The measure provided in general terms for an institution formed through the coöperation of existing national banks, and designed to hold the reserves of the country as well as issue its currency.

Some other students of the subject had been working along somewhat dissimilar, although parallel, lines. Among them was Hon. Isidor Straus of New York City, whose measure provided for the permanent organization of the clearing houses of the United States, with the purpose of permitting them regularly to issue supplies of currency as the gold reserve fund of the community was advanced, the thought in that plan being that, inasmuch as aid had been obtained through clearing-house coöperation in times of panic, the type of coöperation to be furthered by any new law should be something modeled on this clearing-house system. Ideas of a similar kind were strongly urged not only by Mr. Straus, who was for some time a member of Congress and a well-known mer-

chant of New York City, but likewise by other able students of the problem. Another group of thinkers was more and more drawn toward the idea of a central bank modeled upon European institutions and designed to hold the funds of the country. Conspicuous among these was Hon. M. L. Muhleman. There was a multitude of bills and drafts of many kinds, some introduced in Congress, some circulated throughout the country by private publications, some recommended by commercial organizations, and others merely put forward as the work of individual students.

Notwithstanding the apparent prosperity of the country, there were signs of danger in the inflation and unsound finance that prevailed during the period, and these, at about the beginning of the year 1907, had developed into a state of affairs which portended immediate disaster. Banks were greatly inflated with large lines of credit which they could not liquidate. Business men were unable to pay their obligations. In the late summer of 1907 it appeared inevitable that there should be a collapse, and this, in fact, occurred in October. The first open symptom of difficulty was noticed in New York, and from there the trouble steadily

spread throughout the country. As usual, specie payments were suspended, and clearing-house certificates were issued. There was a general shortage of currency accompanied by many bank failures. In order to relieve the situation, Secretary of the Treasury Cortelyou and Comptroller of the Currency Ridgely did all in their power to enlarge the volume of bonds available for the purpose of carrying the new national bank notes. At the opening of the panic it seemed as if all the available bonds had already been deposited with the Treasury to secure national bank notes or else to protect public deposits. As public deposits with banks were then very large, the amount of bonds thus rendered unavailable as a basis for bank-note issue was likewise considerable. The Treasury Department ruled that other securities might be substituted for national bonds behind public deposits, and this released a good many national bonds which were then transferred to circulation account, thereby providing for the issue of an additional supply of notes. In this way considerable enlargement of the circulation was obtained, but, as on former occasions, the assistance came too late to do very much good.

It was strongly felt that Congress ought

to do something by way of relief, particularly as another presidential election was in sight. Consequently, in the spring of 1908 a bill was reported by the House Banking and Currency Committee and another by the Senate Committee on Finance. The House bill was a measure calling for the issue of currency based on commercial paper, while the Senate plan, speedily known as the Aldrich bill, sought to meet the difficulty by allowing banks to deposit with the Treasury other kinds of bonds in protecting their circulation. The philosophy of the House bill was more complex, being based on the view that what the country needed was a thorough revision of its banking methods, particularly as related to the issue of currency, with a flexible note issue backed by commercial paper. By a legislative manoeuvre there was now substituted for the Fowler bill a plan which became known as the Vreeland bill, and called for the issue of currency by associations of banks, called at first clearing-house associations, on the basis of commercial paper deposited with such associations. The bill was originally incredibly crude, and was changed almost daily for a long period of time. It finally assumed greater feasibility and was passed by the House of Representatives.

The Aldrich bill had meanwhile been passed in the Senate, and efforts were now made to adjust and combine the two. Ultimately this \*attempt resulted in the so-called Aldrich-Vreeland Act of May 30, 1908, which permitted the issue of currency based on commercial paper by associations of banks known as "National Currency Associations," while it also permitted national banks to deposit bonds of specified classes with the Treasury Department, and to receive direct issues of currency based thereon. In every case the new currency was made the subject of a very high rate of taxation, it being supposed that this would force the notes to retire rapidly. One feature of the Act was a provision for a "National Monetary Commission" to consist of senators and representatives only. The Commission was given almost unlimited power of spending money in furtherance of its inquiry, and was directed to investigate currency and banking conditions wherever it saw fit, and report to Congress what further action was needed.

The control of Congress changed in 1910, a Democratic majority appearing in the House of Representatives, while dissatisfaction with the expenditures of the Commission for travelling

and publishing began to be expressed. Late in the summer of 1910 Senator Cummins of Iowa succeeded in securing the adoption of a resolution calling for some report by the Monetary Commission within a specified period. In December following the outlines of a bill drafted for Senator Aldrich became known to the public, and shortly thereafter the measure was adopted by the National Monetary Commission. This later became known as the Aldrich bill.

The Aldrich or Monetary Commission bill was a lengthy and detailed legislative proposal which had been worked out with the aid of banking authorities, and which presented a plan for the complete reorganization of the banking system of the country. In order to understand the Aldrich bill thoroughly it must be remembered that, as already suggested, it was merely the outcome of a long period of discussion and controversy. The brief treatment to which we are necessarily limited prevents us from considering more than a very few of the antecedents of the bill; but it is important to note that the measure had been preceded by two other proposals of similar character, which had been worked out independently of those who had the Aldrich bill in hand. These were the Fowler

and the Muhleman bills. A true understanding of the Aldrich bill, and what was done in the way of legislation subsequently, can best be attained, therefore, by a brief sketch of these three measures.

The object of the plans presented in these three proposed measures was that of arranging a coöperative organization of the banks of the United States which should serve to afford these banks the means of rediscounting their paper at times when they required assistance or accommodation in order to continue extending loans to their customers, and in order to avoid the curtailment of credit which in the past has frequently resulted in precipitating commercial panics and stringency. The fundamental idea running through the proposals was that of centralizing the control of discounts as well as that of applying a more rigorous method of oversight to the operations of the several banks expected to participate in the new scheme. It was supposed by the authors of these plans that the institution which they aimed to create would accomplish at least the following financial results:

- (1) Establishment of a more or less uniform rate of discount throughout the United States, and thereby the furnishing of a certain kind of

control over bank operations which should be similar in all parts of the country.

(2) General strengthening of reserves in order that such reserves might be held ready for use in protecting the banks of any section of the country and so enabling them to go on meeting their obligations instead of suspending payments, as has so often been necessary in the past.

(3) Furnishing of an elastic currency by the abolition of the existing bond-secured note issue in whole or in part, and the substitution of a freely issued and adequately protected system of bank notes which should be available to all institutions which had the proper class of paper for presentation.

(4) Management and commercial use of the funds of the Government which are now isolated in the Treasury and sub-treasuries in large amounts.

(5) General supervision of the banking business and furnishing of more stringent and careful oversight.

Other objects were sought, incidentally, in these plans, but they were not as fundamental as the chief purposes just enumerated.

The plans presented a general community of



design and similarity of arrangement which was not necessarily the outgrowth of plagiarism or imitation, but had resulted from the facts that some proposition of the same general kind had been under consideration for many years past, and had commended itself to leading bankers and business experts, and that the idea of combined action had also the support of European experience, nearly every European country being equipped to-day with a central banking mechanism of some kind. This notion of a central banking mechanism which should economize resources and sustain the several banking units was thus admittedly desirable, provided that various difficulties connected with it could be overcome. It was in overcoming these difficulties and avoiding the embarrassments that necessarily arise from such a proposition, that the three plans under consideration, as well as numerous others of the same general description, varied from one another. These variations were of great significance when it is sought to adopt a piece of practical legislation for the purpose of remedying existing conditions; but they are not fundamentally important from the general theoretical standpoint.

The particulars in which the various plans

differed one from another are numerous, but the principal points upon which those who had framed these plans concentrated their attention may be enumerated as follows:

(1) Methods of providing capital for the suggested central organization.

(2) Relationship between the central organization and branches of the same.

(3) Details of the relationship between the institution and its branches on the one hand and existing banks on the other.

(4) Relations between the proposed institution and its branches on the one hand and the public on the other.

(5) Relations between existing institutions on the one hand and the Government on the other.

(6) Methods of controlling the proposed mechanism.

(7) Details of the lines of business to be transacted by the proposed institution.

Although the Aldrich bill was in a general way in line with what had been often urged and widely talked about both in Congress and out of it, and although it could have been amended in such a way as to eliminate many of the objectionable ideas which had been veneered upon

the fundamental basis of banking theory and practice which constituted its substructure, the measure never commended itself to the public. As a matter of fact, it never received consideration at the hands of a committee in either house of Congress, and within a few months after it was introduced the control of both houses had largely slipped from the hands of the political group which was responsible for it. The Democratic party had succeeded the Republican in full charge of the House of Representatives, and a combination of party groups had practically deprived the conservative Republicans in the upper chamber of Congress of the majority control which they had long exercised there. Consequently it became necessary for the Democratic party to consider carefully what should be its attitude with reference to the subject of banking legislation. Should it accept the Aldrich plan as a scientifically developed, perhaps almost perfect, proposal, to be treated, therefore, as an entirely non-partisan and non-political matter, or should it approach the subject from a fresh standpoint with a view of determining upon its own measure of legislation? The latter course was the one determined upon; and upon the Banking and Currency Committee of the

House of Representatives fell the duty of examining the great mass of information already collected with reference to currency and banking, of analyzing the data at hand, of simplifying the results thus obtained, and of selecting those which were deemed most worthy to be incorporated into a measure for the reorganization of the banking and currency system of the nation.

## CHAPTER III

### THE FEDERAL RESERVE ACT

WE MAY now present a brief outline sketch of the legislative history of the Federal Reserve Act. Without at present entering into the early history of the process by which the measure itself was framed, between April, 1912, and June, 1913, it may be generally said that during the period referred to a preliminary draft of what later became the Federal Reserve Act was shaped under the auspices, first of a sub-committee of the House Banking and Currency Committee as organized in the Sixty-second Congress, Hon. Carter Glass of Virginia being chairman of the sub-committee in question, and then under the auspices of Mr. Glass himself as the ranking Democratic member and prospective chairman of the Banking and Currency Committee to be organized in the House of Representatives of the Sixty-third Congress.

Upon the basis of careful investigation, conducted under direction and supervision of the

committee, partly at public hearings during the winter of 1912-1913, partly by private investigations, it had been determined what features should and what points should not be embodied in the proposed measure. The bill thus drafted had been submitted to and had received the approval of President Woodrow Wilson, and was thus, when introduced in the House of Representatives on June 18th, an administration bill in the sense that it had received the approval of those charged with administrative responsibility, while it had been developed by the authorized legislative agencies of Congress. As thus drafted for presentation, the banking bill covered certain main points, which were subjected to no serious change and which have been succinctly reviewed in a report, submitted to the House on September 9, 1913, by Chairman Glass on behalf of the Banking and Currency Committee, as follows:

“After looking over the whole ground, and after examining the various suggestions for legislation, some of which have just been outlined, the Committee on Banking and Currency is firmly of the opinion that any effective legislation on banking must include the following fundamental elements, which it considers indis-

pensable in any measure likely to prove satisfactory to the country:

“1. Creation of a joint mechanism for the extension of credit to banks which possess sound assets and which desire to liquidate them for the purpose of meeting legitimate, commercial, agricultural, and industrial demands on the part of their clientele.

“2. Ultimate retirement of the present bond-secured currency, with suitable provision for the fulfilment of Government obligations to bondholders, coupled with the creation of a satisfactory flexible currency to take its place.

“3. Provision for better extension of American banking facilities in foreign countries to the end that our trade abroad may be enlarged and that American business men in foreign countries may obtain the accommodations they require in the conduct of their operations.”

Beyond these cardinal and simple propositions the committee has not deemed it wise at this time to make any recommendations, save that in a few particulars it has suggested the amendment of existing provisions in the National Bank Act, with a view to strengthening that measure at points where experience has shown the necessity of alteration.

In order to meet the requirements thus sketched, the committee proposes a plan for the organization of reserve or rediscount institutions to which it assigns the name "Federal reserve banks." It recommends that these be established in suitable places throughout the country to the number of ~~twelve~~ as a beginning, and that they be assigned the function of bankers' banks. Under the committee's plan these banks would be organized by existing banks, both national and State, as stockholders. It believes that banking institutions which desire to be known by the name "National" should be required, and can well afford, to take upon themselves the responsibilities involved in joint or federated organization. It recommends that these bankers' banks shall be given a definite capital, to be subscribed and paid by their constituent member banks which hold their shares, and that they shall do business only with the banks aforesaid, and with the Government. Public funds, it recommends, shall be deposited in these new banks which shall thus acquire an essentially public character, and shall be subject to the control and oversight which is a necessary concomitant of such a character. In order that these banks



may be effectively inspected, and in order that they may pursue a banking policy which shall be uniform and harmonious for the country as a whole, the committee proposes a general board of management entrusted with the power to overlook and direct the general functions of the banks referred to. To this it assigns the title of "The Federal Reserve Board." It further recommends that the present national banks shall have their bonds now held as security for circulation paid at the end of twenty years, and that in the meantime they may turn in these bonds by a gradual process, receiving in exchange 3 per cent. bonds without the circulation privilege.

In lieu of the notes now secured by national bonds and issued by national banks, and, so far as necessary in addition to them, the committee recommends that there shall be an issue of "Federal reserve treasury notes," to be the obligations of the United States, but to be paid out solely through Federal reserve banks upon the application of the latter, protected by commercial paper; and with redemption assured through the holding of a reserve of gold amounting to  $33\frac{1}{3}$  per cent. of the notes outstanding at any one time. In order to meet the require-

ments of foreign trade, the committee recommends that the power to establish foreign branch banks shall be bestowed upon existing national banks under carefully prescribed conditions and that Federal reserve banks shall also be authorized to establish offices abroad for the conduct of their own business and for the purpose of facilitating the fiscal operations of the United States Government. Finally and lastly, the committee suggests the amendment of the National Bank Act in respect to two or three essential particulars, the chief of which are <sup>1</sup> bank examinations, the present conditions under which loans are made to farming interests, <sup>2</sup> and the liability of stockholders of failed banks. It believes that these recommendations, if carried out, will afford the basis for the complete reconstruction and the very great strengthening and improvement of the present banking and credit system of the United States. The chief evils of which complaint has been made will be rectified, while others will at least be palliated and put in the way of later elimination.

The Federal reserve banks suggested by the committee as just indicated would be in effect coöperative institutions carried on for the

benefit of the community and of the banks themselves by the banks acting as stockholders therein. It is proposed that they shall have an active capital equal to 10 per cent. of the capital of existing banks which may take stock in the new enterprises. This would result in a capital of something over \$100,000,000 for the reserve banks taken together if practically all existing banks should enter the system. It is supposed, for a number of reasons, that the banks would so enter the system. More will be said on this point later in the discussion. How many State banks would apply for and be granted admission to the new system as stockholders in the reserve banks cannot be confidently predicted. It may, however, be fair to assume at this point that the total capital of the reserve banks will be in the neighborhood of \$100,000,000. The bill recommended by the committee provides for the transfer of the present funds of the Government included in what is known as the general fund to the new Federal reserve banks, which are thereafter to act as fiscal agents of the Government. The total amount of funds which would thus be transferred cannot now be predicted with absolute accuracy, but the released balance in the general fund of the

Treasury is not far from \$135,000,000. Certain other funds now held in the department would in the course of time be transferred to the banks in this same way, and that would result in placing, according to the estimates of good authorities, an ultimate sum of from \$200,000,000 to \$250,000,000 in the hands of the reserve banks. If the former amount be assumed to be correct, it is seen that the reserve banks would start shortly after their organization with a cash resource of at least \$300,000,000. As will presently be seen in greater detail, it is proposed to give to the reserve banks reserves now held by individual banks as reserve holders under the National Banking Act for other banks. Confining attention to the national system, it is probable that the transfer of funds thus to be made by the end of a year from the date at which the new system would be organized would be in the neighborhood of \$350,000,000. If State banks entered the system and conformed to the same reserve requirements they would proportionately increase this amount, but for the sake of conservatism the discussion may be properly confined to the national banks. For reasons which will be stated at a later point, it seems likely that

✓ at least \$250,000,000 of the reserves just referred to would be transferred to the reserve banks in cash; and if this were done the total amount of funds which they would have in hand would be at least \$550,000,000. This ✓ would create a reservoir of liquid funds far surpassing anything of similar kind ever available in this country heretofore. It would compare favorably with the resources possessed by ✓ government banking institutions abroad.

It will be observed that in what has just been said the reserve banks have been spoken of as if they were a unit. The committee, however, recommends that they shall be individually organized and individually controlled, each holding the fluid funds of the region in which it is organized and each ordinarily dependent upon no other part of the country for assistance. The only factor of centralization which has been provided in the committee's plan is found in the Federal Reserve Board, which is to be a strictly Government organization created for the purpose of inspecting existing banking institutions and of regulating relationships between Federal reserve banks and between them and the Government itself. Careful study of the elements of the problem has convinced the committee that

every element of advantage found to exist in co-operative or central banks abroad can be realized by the degree of coöperation which will be secured through the reserve bank plan recommended, while many dangers and possibilities of undue control of the resources of one section by another will be avoided. Local control of banking, local application of resources to necessities, combined with Federal supervision, and limited by Federal authority to compel the joint application of bank resources to the relief of dangerous or stringent conditions in any locality are the characteristic features of the plan as now put forward. The limitation of business which is proposed in the sections governing rediscounts, and the maintenance of all operations upon a footing of relatively short time will keep the assets of the proposed institutions in a strictly fluid and available condition, and will insure the presence of the means of accommodation when banks apply for loans to enable them to extend to their clients larger degrees of assistance in business. It is proposed that the Government shall retain a sufficient power over the reserve banks to enable it to exercise a directing authority when necessary to do so, but that it shall in no way attempt to carry on through its

own mechanism the routine operations of banking which require detailed knowledge of local and individual credit and which determine the actual use of the funds of the community in any given instance. In other words, the reserve bank plan retains to the Government power over the exercise of the broader banking functions, while it leaves to individuals and privately owned institutions the actual direction of routine.

As first presented, the bill was taken in hand by the House Committee on Banking and Currency, which, however, had not been named until a few days previous to the introduction of the measure. The committee held its first meeting June 6th; then began the active work of considering the bill on July 7th; and continued regular sessions several hours each day until the beginning of September. The bill was then reported to a Democratic caucus, and after about two weeks of discussion behind closed doors was ratified, and was thereupon formally reported, on September 9th, to the House of Representatives, where it was taken under debate on September 10th and ultimately forced to a passage in the House on September 18th. It was then sent to the upper chamber and was taken under advisement in the Senate Banking Com-

mittee where extensive hearings were promptly begun and were continued until October 25th. Thereafter, a month of consideration in committee ensued, and subsequently three days of caucus consideration in the Senate, a final report to the Senate as such being rendered on December 1st. Debate then began and was continued, first in the intervals of business already scheduled, then at practically continuous sessions until December 19th when a final vote was secured and the measure within twenty-four hours sent to conference, from which it emerged on December 22d, receiving, as already stated, the President's signature on the following day.

When reported by the Senate Banking Committee, after its own consideration and that of the caucus, the banking bill contained no important changes in theory, as compared with the House draft, save only in the section which related to the method of retiring existing national bank circulation and of providing for the refunding of United States 2 per cent. bonds. The bill, however, differed essentially from the House measure in many details, some of them of great importance, others of minor significance. The framework of the bill had been changed in no fundamental particular, but remained as it



✓ with 5 per cent. against time deposits, both the proportion to be kept in the reserve banks and the rate of transfer being altered, as compared with the House bill, in such a way as to make the process of transfer easier for the contributing banks. By way of still further lightening the burden, which, it was supposed, would be imposed upon the banks in this process of transfer, it was provided that one half of the credits to be established with the reserve banks created under the bill might be paper eligible for rediscount, while the notes issued by the reserve banks were also allowed to be counted in the reserves of these member banks. The Senate bill, moreover, extended the provisions of the so-called Aldrich-Vreeland law of 1908, and inserted in the measure a provision authorizing the Secretary of the Treasury to sell bonds for gold, should such a measure be necessary at any time to maintain the redeemableness of Federal reserve notes. Lastly, the Senate bill largely altered the provision which had been made in the House for the collection of checks and drafts at par throughout the country. While under debate in the Senate, the bill underwent some further alterations, none of which, however, materially changed its more important aspects, as already

described. Such clauses as were inserted were intended mainly to clarify the language or to add further safeguards which had been found or thought to be necessary here and there as the work proceeded.

Little needs to be said of the debate in the Senate. It is doubtful whether any important provision was altered on the floor as the result of discussion, although a few points at which the measure was weak were subsequently rectified; probably as a result of the repeated attacks to which they had been subjected during the weeks before the measure was finally adopted. As the bill ultimately passed the Senate, it differed from the plan of the House in no respect that was of theoretical importance. It retained the provision for sales of stock to private holders and for the voting of the stock by trustees representing these holders, as well as for the purchase of stock by the United States itself, in case of necessity for so doing. It moreover introduced a change in the method of distributing the earnings of Federal reserve banks whereby a portion of those earnings was to be employed for establishing a fund for guaranteeing the deposits of member banks which had taken stock in the Federal reserve banks of their district.

It altered the number of banks by cutting it to no less than eight and not more than twelve, in place of the "at least 12" of the House bill. While many minor changes and alterations of wording were made throughout, they ~~did~~ not alter the essential structure of the plan, but in some cases carried it further than the framers of the House measure had been able to do, embodying ideas that had been urged by them while the measure was under discussion, but for which they had not succeeded in obtaining endorsement. Perhaps the most injurious features which were added during the Senate stage of the measure were the provision cutting reserves of member banks and that permitting the introduction of bank notes into reserves as a constituent element therein.

The substance of the work done in conference committee may be summarized somewhat further in order to bring out the points that had been accepted as innovations upon the House bill and those that had been rejected because the changes proposed in them were not deemed wise. Turning first to the alterations in the House bill that secured acceptance, the principal features may be enumerated as follows:

(1) Introduction of provision for sale of stock in Federal reserve banks to the public in the event that not enough banks subscribe for the stock to furnish an adequate capital in any given district.

(2) Provision for alternative voting in the choice of directors of Federal reserve banks so as to insure prompt election.

(3) Reduction of number of Federal reserve banks to not more than twelve, as against the "at least twelve" of the House bill.

(4) Elimination of requirement that all national banks recharter.

(5) Broadening of powers of Federal Reserve Board and modification of language relating to rediscounts between Federal reserve banks, so as to render such rediscounts easier than was intended by the House bill.

(6) Provision that the Secretary of the Treasury might, not must, deposit public funds in reserve banks.

(7) Reduction of reserve requirements placed upon member banks under House bill.

On the other hand, the following important points were yielded by the Senate in the conference:

(1) Omission of provision that holders of

stock sold to private individuals (if any) should have voting power in directorates of Federal reserve banks and elsewhere.

(2) Elimination of guarantee of bank deposits by use of surplus earnings.

(3) Elimination of provision that Federal reserve bank notes might be counted in reserves of stockholding banks.

(4) Restoration of provision that many classes of checks should be collected at par throughout the country, and that where such par collection was not enforced the charge for making collection should be fixed by the Federal Reserve Board.

(5) Elimination of domestic acceptances, thereby excluding them from use by stockholding banks and from rediscount by Federal reserve banks.

(6) Modification of reserve requirements as formulated by the Senate so as to require actual cash reserves in the vaults of country banks (the Senate having entirely dispensed with such reserves after twenty-four months after date of the passage of the Act) and general stiffening of reserve requirements made by the Senate, although the final language still constituted a reduction below the House provision.

(7) Reduction of period of maturity for which discountable paper might run.

While many other points of modification and concession on either side might, of course, be enumerated, it is believed that the foregoing presentation is representative and shows sufficiently well the nature of the conference work and the character of the points conceded on either side. Assuming that such a fair or representative selection has been made, it is evident that the work of the conference resulted in the establishment of the House contentions at nearly every essential point, the exceptions to such a remark being found in two main particulars: (1) the reduction in the number of reserve banks and their limitation to not more than twelve at any time, and (2) the provision that public deposits might or might not be made in the reserve banks at the discretion of the Secretary of the Treasury. While other points were significant and important in their way, it can certainly be fairly concluded that on those matters involving important issues of theory the House virtually held its own in most respects. In fact, it is an accurate generalization that the final bill as completed in conference committee and as passed by both

Houses was a closer approach to the original House draft of the measure than anything that had intervened during the time the bill was going through the various permutations to which it was subjected in its slow progress from one stage to another of the legislative process.

At one other point there was marked and vital departure from the original House measure—the provision with reference to the refunding of United States 2 per cent. bonds and the treatment of the currency based upon such bonds. On this subject the final action of the conference was nearly equivalent to the acceptance of a plan formulated by the administration and designed to take the place of all of the various other schemes that had been recommended from different sources in either House.

As has already been seen in Chapter II, the Federal Reserve Act is the product of a lengthy course of development and has grown gradually out of the discussion and analysis of the past twenty years. It was not drawn, even largely, from any single source, but is the product of comparison, selection, and refinement upon the various material, ideas, and data rendered available throughout a long course of study and agitation.) Many bills embodying the same

general line of thought that now finds expression in the new act have been offered in Congress; some have been suggested outside that body. (The most fundamental concept of all—that of uniting the banks of the country into organized groups—is found in the clearing-house organizations, which in time of stress have pooled their resources and converted bank assets into the equivalent of reserve money.) The bills prepared by or under the direction of Hon. Isidor Straus, Hon. J. H. Walker, Hon. Charles A. Fowler, and Hon. Maurice L. Muhleman, already described, have supplied at least the basis for many of the detailed analyses and methods of treatment that are found in the Federal Reserve Act. Earlier than any of these was the bill recommended by the Indianapolis Monetary Commission, which did not provide for coöperative unions of banks, but upon which the framers of the present Act have evidently drawn for some of their ideas. The latest bill in the long series which was available for study to the framers of the Federal Reserve Act was that prepared for the National Monetary Commission and called in popular language the “Aldrich bill.” By many the new law is regarded as a partial copy of, or plagiarism



from, the Aldrich bill; and that view has been widely expressed both in and out of Congress. The Aldrich bill provided for a single central "reserve association" with scanty public oversight, with control vested practically wholly in the banks, and with the preponderance of power in the hands of the larger institutions which owned stock. It so arranged things as to keep this "reserve association" relatively inactive except upon special occasions of panic or disturbance. It made no direct provision for the shifting of reserves in part from existing banks to the proposed associations, but it relied upon inflation due to the placing of bank notes issued by the central association in the reserves of the stockholding banks for protection in time of danger. (The ~~new~~ Act provides for twelve reserve banks, introduces the principle of local control, calls for strict government oversight, shifts reserves from present correspondent banks to the new institutions, minimizes the influence of the larger banks in directorates, and generally diffuses control instead of centralizing it. It leaves banking as such to be practised by bankers; it vests the control of banking in the hands of government officers.) The theory and purpose of the new Act are widely

different from those of the Aldrich bill. Where the Aldrich proposal veers widely away from the tendencies that have been developed during the preceding ten years of American banking discussion, the Federal Reserve Act closely follows them. Indeed, the Act of 1913 is closer to any one of half a dozen bills of former years than to the Aldrich proposal.

From the standpoint of technique, as already noted, the case is quite different. With regard to stock issues, kinds of paper eligible for rediscounts, and not a few other particulars, the Federal Reserve Act follows lines laid down in the measure which bore the name of Senator Aldrich. In fact, the original House bill, for strategic purposes, retained, wherever it could safely do so, the language of the Aldrich bill as regards banking technique, its framers recognizing that by so doing they enormously reduced the hold of the opposition and immensely contracted the field within which the familiar charges of "unsoundness" could find scope.

Perhaps the most notable and beneficial changes made by the Federal Reserve Act—the transfer of reserves from reserve and central reserve city banks and the provisions for par collection of checks whenever possible—were

not mentioned either in the Aldrich bill or in those of its predecessors already referred to. They were not only new elements in the movement, but were undoubtedly among the elements in the measure which proved hardest to enact into law. From the beginning, the most strenuous opposition was offered to them, notwithstanding that both features were admitted to be sound in principle. It was, therefore, only after a sharp contest that they succeeded in gaining a definite foothold, inasmuch as they constituted a new and distinctly distasteful element in the whole legislative proposal.

A review of the detailed provisions of the measure shows, therefore, that, while the conception of banking reform upon which it is founded is the same that has constituted the staple of the banking reform movement of recent years, and while the conception of a union of banks is directly borrowed, as in other bills of the past decade, from the actual practice of the banks themselves as developed under the stress of circumstances in the form of clearing-house organizations; while, moreover, certain phases of the technique of the legislation itself followed the lines of the Aldrich or Monetary Commission bill, and while other portions of the Act have

been adapted from well-known legislative proposals that have figured within the past few years of banking discussion, the Act as a whole is based upon a conception and plan entirely its own, applies in many fundamental respects methods of control and administration that have been given at least a new form, and includes several important innovations not heretofore conspicuous in banking discussion, although admittedly significant, not to say necessary, to any thorough reorganization upon sound principles.

It is now necessary to devote some attention to the new legislation from the broad general standpoint and to note the significance of the measure as it finally became law. To the student of banking it need hardly be said that the striking aspects of the legislation are these three: (1) the creation of a general discount market for commercial paper; (2) the systematic pooling of reserves of existing banks; and (3) the provision of an elastic currency. In the multitude of details provided by the legislation, and in the various adjustments rendered necessary by it with respect to Government deposits, bank reserves, examinations, and other more or less important matters, it is noticeable throughout that everything done has been for the purpose of promoting

the objects already enumerated, and of insuring the transformation of American banking from its present basis of organization to its new proposed type of effort. If these chief objects shall be accomplished in actual practice, the legislation will have been amply warranted, and, it need hardly be said to a professional reader, will completely revolutionize the banking and credit situation, to the great profit not only of the banks themselves but of their customers. That the banks will greatly profit under the bill is susceptible of easy mathematical demonstration. That the business public will profit in a far higher degree than the banks is less obvious, but is a fact which constitutes the chief basis for the legislation. Were it not true, the time and effort expended in securing the present result would scarcely have been warranted. In its real essence the new law is in fact and in the best sense of the term a "business man's measure."

Heretofore American banking has been too largely an agency in the service of speculation. This statement is borne out by the following considerations: (1) the rates controlling the flow of gold out of the United States have been those dictated by the call loan market, not

those prevailing in the commercial discount market; (2) the funds which the banks desired to have ready to hand have been customarily invested in demand loans on stock rather than in quick commercial paper or short-term foreign exchange; (3) in times of crisis or pressure the banks have shortened loans in this country instead of, as in foreign countries, enlarging them to accommodate legitimate borrowers. If they have undergone sacrifice, it has been for the primary purpose of upholding and safeguarding the stock market.

The new Act changes this condition in the following ways: (1) it transfers a small but necessary fraction of the ultimate reserve money of the country to Government-inspected institutions, located in various parts of the country, where they will be quickly responsive to, and in sympathy with, business necessities, and prescribes by rigid rules that these funds shall be applied solely to commercial needs and to nothing else, since the loans that may be made by these new banks are narrowly restricted in term and in character; (2) it broadens the methods of doing business allowed to national banks, so far as relates to investments in legitimate commercial paper, and narrows them cor-

respondingly, so far as relates to investment in stocks and bonds; (3) it increases the loaning power of the banks of a given community, and promises to such banks, when in need of assistance, the support which will be derived from the combined resources of their fellow banks in the same community or region. Its effort is thus to promote the growth of commercial credit and to protect that credit when brought into existence. It differs from the present law in that it refuses longer to look upon the business man as one who "borrows money" at a bank, and regards him as one who manufactures a commodity—commercial credit and the paper representing it—which he sells to banks, and which it is the function of the latter to insure and to keep liquid. It regards the duty of the bank as being, above all things else, that of maintaining specie payments and sustaining the solvency of the community; and it declines to consider the banker as one whose duty it is to promote enterprises, float issues of securities, or aid in stock speculation. That all these phases of financial effort have their place—a desirable place when properly defined and recognized—the Act fully concedes, but it holds in principle that that place is not

found in connection with the work of commercial banks.

If the business community contents itself with simply continuing its present methods of operation, it will derive great advantage from the law. It will find: (1) that local banks will be able, by rediscounting the paper of local enterprises, to provide the funds needed by such enterprises in their operations; (2) that there will be no such wide fluctuations of interest rates either geographically or from season to season as now exist; (3) that there will be no necessity of emergency measures to safeguard the country from the possible results of financial panic or stringency. Credit will be more simply available, cheaper, and more equitably open to all. Not the least advantage to the business man will be found in the provisions with respect to bank examinations, since through these, it may be hoped, many operations which have been the disgrace of American banking in the past will be early detected and corrected before they have had time to eat out the heart of institutions which might otherwise have continued sound and solvent. This is equivalent to saying that, under the new law, credit, even if there be no change in business



methods, will be cheaper and more evenly diffused, as well as more steady and more certainly to be counted upon by those who do business by acceptable methods. But the community will not gain the greatest advantage from the measure if it adheres merely to established types of operation. The new act provides for the creation of a true discount market, such as has existed for many years in every European country. This means that every merchant of established local credit may in the future count upon a free sale for his paper throughout the reserve district in which he is situated, and to a somewhat lesser degree generally throughout the country. The rediscount principle, when fully worked out, taken in connection with the use of the acceptance system, will enable the sound, even though small, manufacturer or trader to get the advantage of the best rates of commercial credit that prevail anywhere within his region of the country. If there is capital to spare—unemployed and seeking occupation—he may expect that, through the general sale of bills under the new system, such capital will be available for the purchase of his paper and will be so employed. By the judicious use of the acceptance, the

local bank will be enabled to facilitate the movement of goods into and out of the country, and will at once make the utmost of its own capital and at the same time enable its clients to gain the widest employment for their own resources.

(The net result of these various influences should be: (1) considerable reduction in average rates of interest on commercial paper throughout the United States; (2) very great reductions in the rates in certain sections remote from commercial centres; (3) stability and certainty in distribution of credit; (4) creation of new and more convenient types of paper.

Not the least important of the provisions of the new measure is that which assures to the business man the cheaper collection and transmission of his funds. The Act provides for the deposit of many classes of checks and drafts at par with Federal reserve banks, and thereby aims to establish a parity of exchange among banks within every Federal reserve district and then between the Federal reserve banks themselves. It permits charges to be made by member banks that correspond to the actual cost to them of collecting funds for their clients, but it places these charges under Federal control and specifically authorizes the

Federal Reserve Board to restrict them by rule. This is as it should be. In years past American commerce has suffered severely from the infliction of high, not to say excessive, charges for check collection upon business men throughout the country. Much of this evil may, however, be expected now to disappear. The banks will be restricted, when the system is fully in operation, to moderate rates; and thereby a great burden will be lifted from the backs of the commercial community. In the opinion of some, this burden will in part be removed by the process of clearing checks instead of collecting them, which is to be inaugurated under the new system. But whether it does so disappear or not, the merchants of the country will be relieved of the excess charges made by the banks in the way already indicated. In many instances this will save thousands of dollars annually to individual firms.

A less direct, although most important, aspect of the new law in its relation to business is seen in the economy of gold that will be effected under it. The original bill provided for maintaining reserves at about their present height, in the belief that ultimately the governing board would let them all down to the level pre-

scribed for country banks. The final Act made a very great reduction in reserve requirements and thus released a great volume of money after all new needs for the reserves of the Federal reserve banks had been complied with. That this will produce some danger of inflation during the transition period—a danger that will need to be carefully guarded against by the best sense of the banking community—is evident. After that period has been passed, the reduction in the amount of gold that must be carried constantly in bank vaults will really be far-reaching. The United States has for many years been obliged by its antiquated banking methods to use much larger gold reserves than any other country in the world in proportion to business done. This was as much a waste as any other unnecessary employment of capital. It meant that the actual cost of operating a bank, which had to be recovered from borrowers in interest charges, was necessarily greater in proportion to the enlarged expense of carrying an unnecessarily high reserve. This cost in turn was heightened in times of panic by the very great expense that had to be incurred for the sake of getting more gold with which to build up the reserves when the latter had been

depleted. By lessening this important item of cost in banking, and by reducing the exceptional and sporadic elements of cost growing out of panic conditions from time to time, reductions of interest rates will be rendered feasible and will ultimately transfer their effect to the commercial world. In this same connection it deserves to be noted that the new system will also render the control of the country's gold supply much easier and simpler. It provides the machinery for dictating, upon occasion, changes in rediscount rates intended to prevent exportation, and upon other changes intended to aid importation. The mechanism will be automatic and effective and will replace the antiquated, costly, and not very effective methods that have had to be followed in the past. This will directly aid the man engaged in foreign trade and will immensely assist in the management of foreign exchange operations. Exchange will be furnished at much less cost to the community and our rates of exchange will be much more closely harmonious with those of the rest of the world.

In times past there has been constant and well-founded complaint that American business men engaged in foreign trade or operating

branches of their houses abroad were obliged to depend upon foreign banks for their accommodation or else finance themselves practically unaided. Where, as in the South American trade, it has been necessary for the American business man to resort to branches of European banks established in the various countries, it has been asserted that such banks, working as they did in close harmony with merchants of their own nationality, were often unfaithful to their American clientele, allowing competitors to know their business operations, and, when disposed to do so, cutting off their credit in favor of such rivals. These charges have had more or less foundation, and it has certainly been true that the banking accommodation of Americans engaged in foreign operations has been poor even at the best. Under the new law, banks of suitable capitalization may, under the supervision of the Reserve Board, establish branches in foreign countries, and operate them subject to very broad and liberal terms of business management. This should end the constant complaint about lack of banking accommodations and should place Americans in the foreign trade upon a footing of equality with foreign competitors. It is true that, as has recently been noted, the United

States lacks a supply of well-trained bank managers acquainted with foreign practice and ready to expatriate themselves for the time necessary to carry on a branch office elsewhere. Such shortage of trained men will, however, be overcome as soon as opportunity of a real sort is offered, just as the lack of well-prepared consuls has already been overcome in a very large degree since the consular service was placed, at least partially, upon a footing of efficiency, and promotions made in a measure according to merit. It may be confidently expected that American foreign trade will within a short time be afforded all the assistance that it can reasonably call for under the very liberal provisions now made for foreign branch banking.

✓ The general management of the new system has wisely been taken, in part, out of the hands of bankers, and has been placed, in a measure, ✓ in those of men representing commerce, industry, and agriculture. This is not because of distrust of bankers or because of a feeling that special discrimination should be shown in favor of given classes in the community. It is due to a feeling, everywhere recognized, that the industrial portion of the community should be ✓ given a voice in the management of the commer-

cial credit of the nation, and that banking is, in its highest and best sense, a semi-public function, carried on, not merely as a means of profit, but for the sake of providing for social wants in the creation of credit and the maintenance of redemption. The business man, in the best sense of the word, is expected to take a living and direct part in the work of carrying on the new system, no matter whether he owns stock in any bank or not—and perhaps the more freely if he does not own such stock. He will thus be drafted into service because of the significance of banking to every class and section of the country, and because of the perception that it, like transportation, is no longer to be considered solely a private money-making industry.

To get the full advantage of the system, the business man needs to arouse himself to a new conception of his functions and duties. He needs to bring his methods of borrowing and his view of commercial paper into harmony with European practice, to accustom himself to prompt payment of notes and bills without extended renewals, and to the putting of his business upon a short-term cash basis. He needs further to familiarize himself with the idea of banking in the larger sense as distinct from a mere note-



shaving and stock-manipulating occupation, and to prepare to share actively in the management of the new reserve banks and their branches, in which important places have been reserved for him. When he has fully developed himself along these lines he will find the new legislation perhaps the most important step in the progressive development of business, in the broader sense of the word, that has for many years been taken by the Federal Government. It has the distinction, almost unique among recent acts of legislation, of being not a restrictive or hampering but a constructive measure in its purposes and methods.

## CHAPTER IV

### PUTTING THE ACT INTO EFFECT

IN THE foregoing pages describing the Federal Reserve Act it has been noted that the law was based upon the idea of organization in from eight to twelve districts. The first step toward making the measure effective was, therefore, manifestly that of creating the new reserve bank districts, and of bringing about an election in each of these districts for directors of the banks there to be organized. This duty, by the terms of Section 1 of the law, had been assigned to a board consisting of the Secretary of the Treasury, the Secretary of Agriculture, and the Comptroller of the Currency, known as "The Reserve Bank Organization Committee." The new board automatically came into existence as soon as the law was passed, and found itself in control of the sum of \$100,000 which Congress had assigned to it for the purpose of bearing the expense of organizing the new system. Secretary of the Treasury

McAdoo projected a journey through the country for the purpose of hearing arguments of various cities with reference to their claims for designation as headquarters, in each case, of a Federal reserve bank. Such a trip was actually undertaken immediately after the opening of the new year (1914), and two members of the committee with a corps of aids and assistants visited many of the most important points thought eligible for designation as reserve bank headquarters. It was not possible to visit all the cities desiring such designation, for the number of these steadily increased to about thirty-six; but in those cases where a visit to a given city was out of the question, representatives of that city presented themselves at a specified point and their arguments were heard. Most of them filed through representatives' briefs in which they stated arguments and furnished statistics designed to show reasons for designating them as the headquarters of reserve banks. All this placed in the hands of the Organization Committee an immense mass of material, some of it good, some bad, and much that was irrelevant. Upon its return to Washington, at the end of February, the committee set to work to digest and examine

the data of which it had thus become possessed.

In the meantime, another important phase of the process of organization had been carried through to completion. The Federal Reserve Act had provided that every national bank in the country must either join the new system or else liquidate and surrender its charter within a year of the adoption of the Federal Reserve Act; but it had also provided that within sixty days after the adoption of the Act each such national bank must indicate whether or not it intended to join the system and, by the requirements thereof, in the event that the reply was in the negative, it was understood that such bank would, in accordance with the terms of the Act, cease to be a reserve agent—that is to say, would no longer be authorized to hold the reserves of other banks that might be deposited with it in accordance with the terms of the National Bank Act. The carrying out of this phase of the law had naturally been entrusted to the Comptroller of the Currency, who had communicated with each national bank for the purpose of getting its response. There had been abundant predictions before the Federal Reserve Act was adopted that many national

banks would withdraw because they did not sympathize, it was said, with the methods employed in securing the adoption of the Act, or for some other reason. The final outcome showed that these statements were without basis, for, of the more than 7,600 banks holding national charters, all except fifteen—these being chiefly small institutions—signified within the sixty days allowed subsequent to the passage of the Act their intention of becoming members and stockholders of the Federal reserve bank of the district in which they were situated. Roundly speaking, therefore, it may be said that the acceptance of the system was practically unanimous, and that at the beginning of March, 1914, the Reserve Bank Organization Committee was in position to proceed with the next step in the establishment of a system which would have at least 7,600 members. Some State banks, too, recognizing the power given to them under the terms of the law to join the system, had, in a few instances, indicated their desire to do so. Perhaps a dozen State bank members had pledged themselves at the opening of April, 1914. Meanwhile, the Reserve Bank Organization Committee had not been neglecting the scientific side of its duty.

It had recognized that the formulation of administrative rules designed to carry into effect the mechanism provided by the law would be a task of almost as much difficulty as the original preparation of the law itself. The committee had, therefore, retained the services of a corps of experts who were to be known as the "Preliminary Organization Committee," and who originally acted as a sub-committee, preparing plans and outlining business methods to be pursued by the new system. When finally prepared, the report of this committee covered a great variety of technical subjects, including the forms and methods of subscription for capital stock, the accounting system to be followed by the Federal reserve banks, the interpretation of commercial paper, the establishment of by-laws both for the board, the banks, and any branches the latter might establish, the method to be followed in issuing Federal reserve notes, and the details of the system by which the clearance provisions of the law were to be put into effect. Recommendations on all these points were embodied in a lengthy report which was filed with the Organization Committee early in June, 1914.

The Organization Committee had meanwhile reached a conclusion with reference to the first

phase of the work—the division of the country into districts for the establishment of Federal reserve banks. An examination of the wording of Sec. 2 of the Act shows that general instructions had been given with reference to the performance of this task. The committee could not create less than eight nor more than twelve districts, and it was obliged to establish them as nearly as possible in accordance with the convenience and customary course of business. In selecting the total number of districts to be established many factors necessarily had to be taken into account, some of a theoretical and others of a purely practical nature. In general, it was decided to bring about a certain measure of equality or strength between the several districts. This was not altogether feasible, for, owing to the one-sided development of the banking business under the old banking system, New York was far in advance of all other cities in the amount of its bank capital and deposits. This situation was not due wholly to the natural importance of New York as a financial centre, but was in part the result of the artificial reserve system of the National Bank Act, shortly to be described at greater length, which had led to the placing of the surplus reserves of the banks

quite generally in the hands of New York institutions, where they were employed in loans on Stock Exchange collateral to a very considerable extent. In the hearings before the Organization Committee it had been urged that the committee practically recognize this financial preëminence of New York by assigning to it as large a territory as possible, thereby giving it as great a capitalization as circumstances would at all permit. The other districts to be established under the law would then have been dependent on New York, and the banks in them would have had only a limited amount of capital. They would have been microscopic institutions, as much dependent upon the reserve institution in New York as if they had been regularly organized branches of it. This proposal the committee naturally rejected. Similar to it was a suggestion, emanating from much the same source, that the banks be arranged in three, or, perhaps, four, general groups, in each of which there should be one large institution with two or three subordinate institutions practically dependent upon it. Thus if there had been four dominant institutions at, say, New York, Chicago, St. Louis, and San Francisco, each would have had two subordinate



institutions. These might have been for New York the banks of Boston and Philadelphia or Cleveland; while a similar arrangement would have been made in the other parts of the country. The Organization Committee naturally rejected this proposal also, at least in so far as it could, recognizing that it was out of harmony with the spirit and purpose of the law. The final effort was to establish twelve institutions of somewhat similar size in so far as capitalization was concerned, situated in districts that were geographically united, and yet that would permit of subdivision at a later date should Congress determine upon enlarging the number of banks. On the Eastern seaboard the districts were naturally laid out upon lines believed likely to prove final, while in the Middle West and particularly on the Pacific Coast it was recognized that the growth of population and the development of business would be likely to create new alignments which would call for additional banking headquarters either in the shape of branches—for which the Act made provision—or, more probably, in that of new Federal reserve banks. The decision to establish immediately the total permitted number of twelve Federal reserve banks was undoubtedly the result of a number

of conflicting influences. The Organization Committee evidently recognized that those who were responsible for the law had been looking confidently to the development of a system of local bank control, and doubtless wished to comply with the wishes thus indicated in so far as practicable. The pressure of a great number of cities for action in their behalf naturally tended to confirm and strengthen the disposition to fix the number of banks at twelve. There was at least a reasonable doubt whether it might not have been well to fix the number as low as nine or ten, thereby reserving two or three banks for subsequent placement by the Federal Reserve Board. Not knowing the composition to be given to the Board, or the probable trend of subsequent developments, and recognizing the power of the influences which were opposed to the creation of more than a very small number of reserve banks, the committee inclined toward the largest number, independent of all other considerations.

The arrangement finally determined upon is represented in the accompanying map, which shows in a rough, general way the divisions between the several Federal reserve districts. Accompanying the map is a table showing the

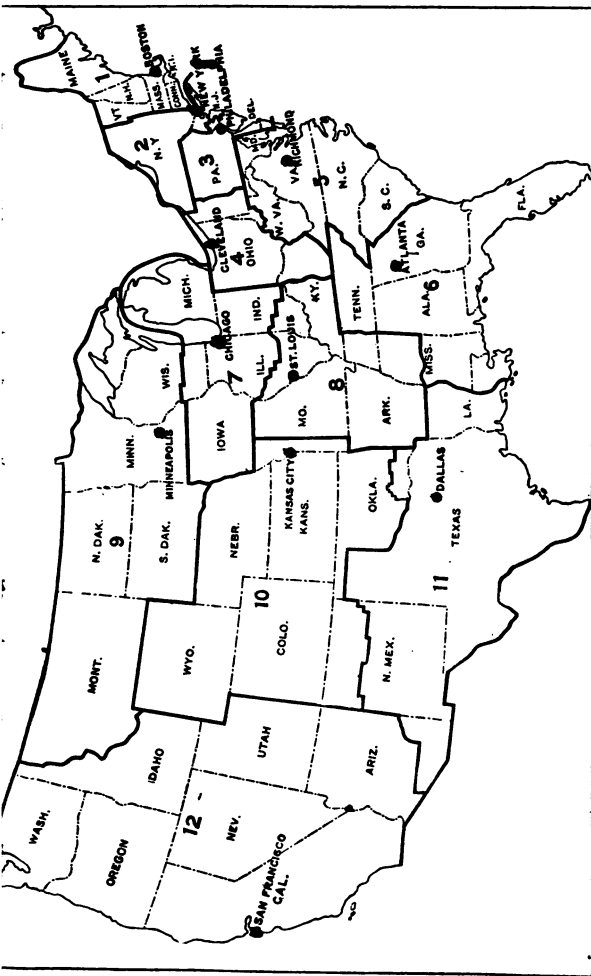
capitalization and number of banks included in each district. It is convenient to note at this point that after the Federal Reserve Board was established there were several appeals from the decisions of the Organization Committee as to districting, and that of these three have thus far been granted, each, however, affecting only a relatively small territory. The accompanying map is drawn to show the division lines established after the decision in the redistricting appeals had been decided by the Federal Reserve Board, and, therefore, differs slightly from the map showing the original outline of the system.

With the districts definitely outlined, it was now possible to proceed with the organization of the several boards of directors. Examination of the law showed that these boards were in each case to have three constituent elements:

(1) A group of three members representing the bankers of the district and elected by them;

(2) A group of three members representing the business men of the district, also elected by the bankers; and

(3) A group of three members presumably representative of the public and designated by the Federal Reserve Board.



MAP SHOWING FEDERAL RESERVE DISTRICTS, WITH CHANGES BY FEDERAL RESERVE BOARD

BANK AND DISTRICT	NO. OF MEMBERS	PAID CAPITAL* (000 omitted)	BANK AND DISTRICT	NO. OF MEMBERS	PAID CAPITAL* (000 omitted)
No. 1. Boston	435	5,134	No. 7. Chicago	987	6,632
No. 2. New York	615	10,987	No. 8. St. Louis	466	2,782
No. 3. Philadelphia	628	5,267	No. 9. Minneapolis	730	2,489
No. 4. Cleveland	764	5,944	No. 10. Kansas City	954	3,023
No. 5. Richmond	506	3,358	No. 11. Dallas	648	2,764
No. 6. Atlanta	385	2,417	No. 12. San Francisco	529	3,931

\* This is one-half of the subscribed capital, Oct. 1, '15.



The Board not yet having been brought into existence, all that could be done by the Organization Committee was to secure the election of the members of the first two groups—that task requiring some time because of the specified period which, under the terms of the Act, was allowed to elapse between the dates when the several steps in the process of election had to be taken. The Act vested the Organization Committee with the same authority in this initial election as, under its terms, would later be exercised by the chairman of the Board of Directors of each bank. Without going into the minuter details of the process, it is sufficient to say that the Organization Committee subdivided the banks of each district into three classes, as required by the law, and then, supplying each with ballots, proceeded to hold an election in each district, as a result of which six directors (three bankers and three business men) were ultimately designated. The first selections thus made turned out in most cases to be satisfactory, although it is undoubtedly true that banking opinion was not sufficiently crystallized and determined to make it certain that the men ultimately voted for represented the final judgment of those who selected them.

In this case, as in others where a new system is in process of development, the first experience is not likely to be exactly identical in nature with those by which it is succeeded.

The next step in the process of developing the reserve machinery was that of selecting and securing the confirmation of the members of the Federal Reserve Board. This was a presidential function, the Act having expressly committed it to the hands of the Chief Executive. Practically the only restrictions imposed upon him were that, of the five members to be chosen, who, with the Secretary of the Treasury and the Comptroller of the Currency, would compose the new board, two should be men of banking or financial knowledge, while no two should be drawn from the same Federal reserve district. It was a situation in which the action of the President was anxiously looked to, partly because of the importance of the work to be done, but partly because of the severity of the contest which had resulted in the adoption of the banking law.

President Wilson ultimately named and secured Senatorial confirmation of five men. The task of securing confirmation, however, had taken much time, and it was not until

August 10th that the members of the Board took the oath of office. This was at a date when the outbreak of the European war had produced confusion throughout the financial and economic system of the United States, and the Board was consequently obliged to devote its attention at first to emergency measures. Ultimately an organization was effected at about the middle of September, and the first task of the Board in the immediate establishment of the new system was recognized as that of choosing three directors for each Federal reserve bank, one of whom should serve as Federal reserve agent and chairman, while a second should be deputy reserve agent and vice-chairman. It proved a matter of no small difficulty to secure proper men for these places, for the Act required that they should dispose of all holdings of bank stock that they might possess, and should in other ways conform to rigid standards, while the Board was desirous that the reserve and deputy reserve agent should be men of tested banking experience in the best sense. Selection of these men involved visits to different parts of the country by members of the Board, and the summoning of various persons to Washington for consultation. It was not



until the end of the first week in October that the final choices were announced. The next step was manifestly that of obtaining a suitable executive staff, and the Board determined to suggest the election by each bank of an officer who should act as chief executive and be known as Governor. The choice of the governors of the banks was, of course, to be made by their several boards of directors, and action was taken promptly, although in some cases it required slightly longer than in others. On October 22d a convention of officers and directors was held in Washington, and at that time many of the preliminary problems of the new system were considered. A number of the governors of the banks had been chosen and were present, and there was a considerable attendance of directors, probably one hundred persons in all. The convention gave an opportunity for the exchange of opinion as to banking conditions throughout the country, and for the ascertainment of the views of those present regarding the scope of the business to be undertaken at the outset.

The final step in the preparations for opening the banks was now that of selecting quarters and equipping the banks to begin business. This involved making leases, selecting an ac-

counting system, and obtaining the material with which to carry it into effect. A committee of governors of the banks adopted a set of accounting forms which had been prepared and submitted to them, and these were then by order of the governors manufactured and dispatched to each bank, so that it was possible for all to open on a uniform plan at a specified time. It remained for the Secretary of the Treasury, to whom that function had been entrusted, to specify when the banks should actually be opened for business. After careful investigation, he named November 16th as the official date. The Board itself had, in the meanwhile, issued its first call for capital stock payments as of November 2d. The banks were accordingly opened on November 16th with the first instalment of their capital stock in vault; and, by the terms of the Act, the reserve deposits to be made with them by the constituent member banks fell due simultaneously with the opening. At the suggestion of the Federal Reserve Board these deposits were largely paid in gold or gold certificates, and within a week after beginning business the total assets of the twelve banks amounted to \$227,000,000, of which a very large proportion was in gold or its equivalent.

## CHAPTER V

### OPENING THE BANKS

THE peculiar conditions which the new system had to meet at its outset cannot, however, be understood without a brief retrospect of events in the commercial and financial world subsequent to the breaking out of war between the European nations at the close of July, 1914.

Upon the outbreak of the war, it was at once evident to all that very striking changes would result in every department of business life. There was no knowledge of the strategy or probable methods to be employed by any of the belligerents, and the general attitude of the business community was based upon the assumption that commerce would, for a time at least, become nearly impossible. As a corollary to that assumption, there prevailed the belief in many circles that American indebtedness to foreign countries would have to be liquidated in cash, and that this process would result in draining away from the United States a corresponding

amount of gold. It was natural, therefore, that the first phenomenon of the war should be the suspension of dealings which it was believed would promote this gold movement, or would cause more serious trouble in any direction than would otherwise be inevitable. The closing of the principal stock exchanges of the country almost immediately upon the definite announcement that the war was unavoidable was thus dictated by two considerations: (1) the belief that prices for stocks and other securities would be reduced to a point so low as to bring about the repurchase of the securities by Americans, who would then be obliged to pay for them in gold; (2) the belief that, in consequence of this reduction of prices, many bank loans based upon securities would have to be "called," thereby bringing about failures and incidentally assisting in the movement of specie out of the country.

In the case of the cotton exchanges, it was at once perceived that the cotton crop, which is so largely produced for export, could not now move abroad with any degree of facility, and that the demand for cotton would undoubtedly be slack. The very fact of the war, therefore, implied heavy reductions in the price of cotton, and the closing of the cotton exchanges was a measure

of self-preservation on the part of the operators, who decided to protect themselves against the inevitable failures which would result from the fulfilment of existing contracts at very low prices. To close the exchanges would result in gaining time, and would, therefore, enable operators to meet their maturing obligations, besides, perhaps, affording an opportunity for actual recovery in cotton prices. This very fact, however, of the closing of the exchanges and the consequent removal of any other established method of determining prices for standard securities and for a staple like cotton involved most profound and far-reaching effects. The exchanges had closed in previous years, but never for the reasons which now controlled them. That they should close because of the fear of failure and the loss of gold implied a serious danger of disaster which appealed powerfully to the public mind, and which presented a problem that could not be explained away. The fact that, coincident with this closing of the exchanges, international trade was practically suspended for several days, and was seriously interrupted for several weeks, until British vessels assumed virtual control of the North Atlantic, tended greatly to increase the public

anxiety. It formed, apparently, good ground for the suspension of business operations and for the non-fulfilment of contracts, even when the very difficult conditions did not themselves compel a recourse to such methods. The fact that foreign countries had adopted legislation deferring the date when debts need be paid or contracts fulfilled, although not paralleled here, produced a sympathetic influence upon business in the United States, which practically resulted in the partial or tentative adoption of a somewhat similar relaxation of commercial requirements in many industries and branches of trade.

Even without the suspension of certain classes of trading throughout the country, partially due as it was to the frenzied demand of European holders of American investments for money, the strain thrown upon our banks as a result of the great change in conditions would have been enormous. The closing of the exchanges, (as already seen) had relieved matters to some extent by enabling the banks to avoid the calling of loans, and thereby to avoid the necessity of forcing customers into liquidation, with the resultant disastrous effect upon themselves. But, on the other hand, the suspension

of operations and the corresponding loss by the public would, it was felt, tend to the hoarding of legal tender money. In order to meet this situation, the banks in many of the large financial centres sought to limit specie payments, taking out emergency currency and clearing-house certificates for the purpose of meeting their indebtedness to the public and to one another. The national currency associations, which had numbered only eighteen up to the beginning of the European war, rapidly increased until they aggregated forty-four; and prompt preparations were made in Washington for supplying emergency currency, under the terms of the Federal Reserve Act, to any such association as might need the notes. At the same time, practically all of the clearing-house associations of the larger cities arranged for the issuing of certificates. Congress, still further to facilitate the work, adopted on August 14th and 15th measures amendatory to the Federal Reserve Act, which had itself amended and extended the Aldrich-Vreeland law. Under these latest amendments very much greater latitude was given for the issuing of currency, and the cost of such issues was reduced by lowering the rates of taxation collected upon such emer-

gency issues. These acts practically gave free range to the taking out of emergency bank notes, and during the weeks succeeding their adoption, and prior to the opening of the new Federal reserve banks, more than \$350,000,000 was issued, the ultimate amount of the issues aggregating \$380,000,000. The amount of clearing-house certificates issued has been estimated, and later unofficially reported, and was probably a good deal over \$211,000,000. It would be a conservative statement, no doubt, to say that in all \$575,000,000 of new media was injected into circulation within a short time.

Obviously no field could have been found for the use of so great a total of new notes had there not been a more than equal withdrawal in other directions. There has been no time when need for a full currency supply was as great as it was before the European war. Nearly \$600,000,000, then, of lawful money must have been hoarded either by banks or by individuals. This, in fact, is doubtless what occurred, banks hoarding the cash by withholding it, so far as possible, both from one another and from the public; while the public hoarded lawful money by retaining it as it came into its possession, and applying to the banks for more supplies of circulating



media, which were furnished in the form of emergency currency made so plentifully available. Thus were placed in evidence two great phenomena of the financial crisis throughout the United States—the withdrawal of the usual forms of money, and the substitution for them of emergency notes protected, of course, by ample security in the form of commercial paper, but, so far as redemption was concerned, backed only by a small reserve specifically set apart for them in the Treasury. A phase of this phenomenon was seen in the tremendous rise in foreign exchange rates, the rates becoming practically prohibitive and thereby causing what amounted to a suspension of financial relationship between the United States and foreign countries, particularly Great Britain.

It was early understood that the real difficulty and danger in the international situation did not lie in the superficial symptoms of trouble, but were found much deeper, being directly due to the fact that international business had been practically suspended as the result of the war. This was a factor of prime and material importance in the whole situation, because the maintenance of established relations between the United States and foreign countries was

directly dependent upon the regular exportation of goods. As was customary during the summer months, there had been large expenditures by American tourists in Europe; and we had become indebted to other countries, particularly Great Britain, for material sums in excess of what we were currently able to liquidate. This was on the assumption, as usual, that such indebtedness would be liquidated through the shipment of agricultural products, particularly of cotton—the country's principal cash crop. The breakdown of trade with Europe through the inability of vessels to run regularly at the outset of the war, and through the reduction of buying power, due to the interruption of all regular industrial, commercial, and financial operations, meant that in the absence of some restoration of the normal course of business it would be necessary to find other means of liquidating our obligations to foreign countries. The first phase of the difficulty was met by investigating the extent of international indebtedness, which, in the absence of other means of payment, would necessitate the draining away of gold from the United States. Such an investigation was undertaken by the Federal Reserve Board, which, by sending out questions to the principal inter-

national bankers of the country; succeeded in forming a more or less trustworthy estimate of the indebtedness on current accounts, these being, of course, of varying maturities extending over several months. The problem thus raised was how to provide for liquidating the debts without losing so much of the underlying gold supply as to impair the convertibility of American securities, and therewith general confidence in American ability to meet obligations. The two chief proposals put forward for bridging over the period of difficulty were the establishment of a joint gold fund by the bankers of the country, and the undertaking of negotiations with Great Britain whereby some relaxation of foreign demands on the United States might be arranged for. These two phases of policy may best be cursorily sketched at this point.

Since the new banks had not yet been established and could not be put into operation for some weeks, it was deemed desirable to furnish a makeshift substitute for the coöperative effort which would have been available for the relief of the situation had the banks been in existence. It was therefore determined to suggest to a number of representative bankers the

establishment of a joint gold fund to be used in providing exchange on Great Britain, and to have this joint gold fund developed at the earliest possible moment. A letter was consequently sent out to the presidents of clearing-house associations throughout the country, under date of September 1st, in which request was made for subscriptions to a fund intended to aggregate about one hundred million dollars. This letter had previously been considered and approved at meetings of representative bankers summoned to meet in Washington on September 4th and 19th, respectively, and was, therefore, issued with their moral support. The answer to this invitation was prompt and effective, a total of more than one hundred and eight million dollars being subscribed and rendered available.

It was almost immediately evident that the operation of this fund was proving decidedly beneficial notwithstanding that only a comparatively small percentage of the amount subscribed was asked for, and that a still smaller percentage was actually used to furnish a basis for gold shipments. Nevertheless, it seemed, during the ten days immediately following the completion of the subscriptions, as if there

might be need for still further relief to the situation. Some of those who were closely connected with the administration of the gold exchange fund brought the subject to the attention of the Secretary of the Treasury, and he extended an invitation to the British Government to send representatives to this country mainly for the purpose of considering the possibility of further adjustment, in the event that the United States did not succeed in liquidating its indebtedness to Great Britain by the natural movement of commodities within a reasonably early period. The British Government designated Sir George Paish and Mr. B. P. Blackett, who came to the United States and on October 23d held a conference with the Federal Reserve Board. Subsequently another conference, attended by a number of representative bankers, was also held, and the situation was discussed in very great detail. Meantime, the establishment of a better understanding with reference to commodities to be considered as contraband and the more effective policing of the North Atlantic rendered possible the restoration of trade with European nations, and the development of the export trade proceeded with a speed which showed that current obligations of the United States to Great

Britain and other countries would be liquidated at an early date without any necessity for further interference. By the time the reserve banks were ready to open, exchange notes on London had fallen to normal, and there was, therefore, no danger that when opened the reserve banks might, as for a time feared by some, find their gold rapidly drawn away from them in order to meet the requirements of the gold export movement.

In another way it was deemed desirable that the Federal Reserve Board should help to facilitate the restoration of customary conditions in the financial market. Almost immediately after the outbreak of war it was seen that, unless hostilities should terminate within a very much shorter period than any one thought likely, serious injury would be inflicted upon the cotton-producing States. As is well known, the cotton crop is largely grown for export, about two thirds of the total production of the United States being annually sold abroad. It happened that an unusually large crop had been planted and was approaching maturity at the moment of the outbreak of the war. This would in any event have depressed prices of cotton, even under ordinary conditions. The almost

immediate closing of the cotton exchanges of the country was, however, precipitated by reason of the interruption to the movement of cotton and the general understanding that, in view of the great area involved in the hostilities, it would not be reasonable to expect a normal demand for the staple to manifest itself. With the exchanges closed, and with shipments of cotton interrupted, the price was unstable and abnormally low, many sales undoubtedly having occurred at five cents per pound. Inasmuch as the cotton crop is raised very largely upon credit, it was necessary to provide some means whereby the southern planter could be assisted to such extension of accommodation as he might require in meeting the obligations he would ordinarily have provided for by the sale of his crop in the open market. Various suggestions were brought to the attention of the Federal Reserve Board, one of them being that of Mr. Festus J. Wade of St. Louis, who suggested, both to the Board and to the Secretary of the Treasury, the establishment of a cotton loan fund somewhat similar in purpose and management to the gold exchange fund. After very anxious consideration the conclusion was reached that some measure of the sort would probably

furnish relief to cotton-growers. Various conferences were held with banking interests for the purpose of securing their coöperation and advice in regard to the matter. Ultimately the bankers of New York pledged fifty million dollars in subscriptions to the fund, provided that fifty millions more should be raised from other bankers in non-cotton-producing States. It was understood that to the one hundred million dollars thus raised should be added thirty-five million dollars contributed by the bankers of the cotton-producing States under a special plan devised for that purpose.\*

While the bankers were laboring to perfect the gold fund, and while the negotiations with Great Britain were in progress, foreign trade was being reëstablished through the effective policing of the North Atlantic, the restoration of usual demand, and the resumption of the ordinary course of business. With the opening of October there came a decided improvement.

With foreign trade in a fair way to recover, it was still necessary to secure a restoration of normal trade conditions within the United

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\* A fuller account of the gold fund and cotton loan plans will be found in the First Annual Report of the Federal Reserve Board, Washington, January 15, 1915.



States, and for this purpose the thing most fundamentally necessary was the setting in motion of the Federal reserve banking system, which had been provided for by Act of Congress the 23d of December preceding. The time intervening between December 23, 1913, and the opening of the war had, as we have seen, been occupied in carrying out the preliminaries of organization; but it still remained for the Federal Reserve Board, the controlling mechanism of the new system, to appoint officers and to provide for the active operation of the banks under its direction. As elsewhere seen, the first detail to which the Board necessarily addressed itself was the completion of the boards of directors of the several institutions, it being necessary to select and elect three in each institution, or thirty-six in all.

In view of the urgent character of the situation regarding the establishment of the banks, it was not considered possible to formulate in advance of their opening a complete set of regulations with reference to their conduct in all matters, and the Board determined to pass at the outset upon those matters only which were deemed absolutely essential to placing the banks immediately in operation. It was felt

that the regulations concerning discount operations and commercial paper in general were fundamental, and that they should be granted first place in any scheme of organization which might be undertaken. The result was the preparation of a document addressed to all Federal reserve agents, sent to them as Circular No. 13, in which the Board set forth its views with reference to the character of operations that should be undertaken by the banks, particularly at the outset. In this it was recommended that the reserve banks confine themselves strictly to short-term, self-liquidating paper growing out of commercial, industrial, and agricultural operations, in the narrow sense of the terms, and that particular care should be taken not to discount or purchase paper which had been issued for the primary purpose of increasing the capital investment of any business.\*

It was, as already seen, considered of primary importance that, so far as possible, the cash to be paid into the banks at the outset should be drawn from the vaults of the contributing member banks. Inasmuch as the Act provided that capital should be paid in gold or gold certifi-

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\*First Annual Report of the Federal Reserve Board, p. 9.

cates, it was to be assumed that the bulk of such payments would, in any event, be made from the vaults of the member banks. Reserves, however, might, of course, be paid in any form of lawful money; and the Act itself had expressly provided that one half of the reserve instalments might be paid in the form of rediscounted paper. It was therefore necessary to appeal to the good judgment and spirit of coöperation of the member banks in order to induce them to abstain from establishing reserves through some means other than that of a direct deposit of cash from their own vaults, and to pay, so far as possible, the sums that were due from them to the reserve banks on reserve account in the form of gold or gold certificates. With this in mind, the Board transmitted to member banks on October 28th its Circular No. 10, in which banks were urged to make their payments in the manner already indicated. As a special inducement, reserve banks were authorized to pay the express charges upon the sums thus sent to them by member banks.

The consolidated statement issued on the Saturday following the opening of November 16th, and showing the condition as of the evening previous, indicates that the banks very

generally complied with the suggestions thus made to them.

The question of a discount policy had next to be disposed of, for it was generally conceded that the adoption of a uniform, consistent policy to be pursued by all was practically necessary to the smooth working of the system. Each reserve bank submitted its views with respect to the rate of discount properly to be applied in its region, but upon tabulation and comparison of these results, it was found that they varied little, the rates ranging from 5 to 7 per cent. A study of the existing state of affairs convinced the Board that at the start conservatism should be the guiding policy in establishing discount rates, and it was consequently voted to set the rates of discount at from  $5\frac{1}{2}$  to  $6\frac{1}{2}$  per cent.

The important effect of the establishment of these rates of discount was to prevent accommodation from being asked by member banks except in those cases where there was a real need for it, since the rates were too high to encourage the borrowing of funds from the reserve institutions simply for the sake of undertaking new operations or of extending those already in existence. As was expected, therefore, the

amount of accommodation applied for at most of the banks was relatively small.

The establishment of the system had, however, greatly relieved the banking situation even without such loans at the reserve banks. Section 19 of the Federal Reserve Act provided for a readjustment of reserves upon a new and lower basis, cutting the percentage of required reserve in central reserve cities from 25 to 18 per cent. of outstanding demand deposits, with 5 per cent. outstanding time deposits; the required percentage in reserve cities from 25 to 15 per cent. of demand deposits and 5 per cent. time deposits; the percentage of reserve in country banks from 25 to 12 per cent. on demand deposits and 5 per cent. time deposits. This readjustment, by the terms of the law, took effect immediately upon the establishment of the new banks, i. e., on November 16th. From the outbreak of hostilities in Europe there had been a difficult reserve situation in most of the financial centres, New York banks particularly being much of the time largely under their reserve requirements because of the heavy drafts made upon them by interior banks and by the public. The change in reserve requirements, however, made a very material alteration in

this condition of affairs, and released, not only in New York, but throughout the country, a very considerable amount of funds which had previously been held by the banks in order to bring themselves within the requirements of law.

Release of actual cash was very large, and the release of lending power as computed on the basis of reserves on the part of member banks was correspondingly larger. Member banks were thereby enabled to extend loans to their customers very much more freely than they had been previously able to do, while at the same time they were able to grant lower rates of interest in due proportion. The prevailing rate of discount for prime commercial paper in New York at the beginning of November was about 6 per cent., while other paper was considerably higher than that figure, and even more difficult conditions prevailed elsewhere. The opening of the reserve system enabled New York banks, because of the very great relief given to them through the release of reserves, to reduce this rate largely; and within two weeks after the new banks had come into existence prevailing interest rates for the best paper went as low as  $3\frac{1}{2}$  and 4 per cent., while acceptances, which had been provided for by the Federal

Reserve Act, were marketed at a still lower rate. In some parts of the South, northern bankers were able to grant accommodation as low as 4 per cent, and in considerable amounts. In view of the greater ease and material relief which was thus accorded, the Federal reserve banks were therefore not called upon to assist member banks with accommodation, such banks naturally refraining from asking aid when they themselves were fully able to meet the situation.

The opening of the reserve banks released, as already shown, a large amount of bank funds, and thereby rendered it possible to extend many loans which otherwise could not have been carried by the banks. It was also seen, soon after November 16th, that the existence of the cotton fund, as was the case with the gold fund, had done useful work by stimulating confidence and by leading to a more liberal extension of credit. With the cotton fund available for long-time loans, and with short-term credit much more freely extended by member banks in view of the reduction of national bank reserve requirements, it was possible for the reserve banks to open with full confidence that the work thus done in safeguarding the situation would relieve them from undue strain, while

fully protecting the cotton-producers who were willing to pay a moderate rate of interest in order to carry their cotton until such time as would enable them to realize full market value for it.

As has been shown by the Secretary of the Treasury in his annual report,\* an early phenomenon of the war was the issue by clearing-houses in many cities of clearing-house certificates. Simultaneously therewith large quantities of emergency currency were issued under the provisions of the Act of 1908, which had been amended and extended by the Federal Reserve Act, and which were still further amended by Congress on August 4th, so as to permit the freer issue of notes in the manner described at an earlier point in this discussion. The channels of circulation were thus clogged long before the end of the summer, notwithstanding the fact that large quantities of gold and gold certificates were withdrawn and hoarded either by banks or by individuals. This condition of affairs made it certain that the reserve banks, upon their organization, would not be instantly pressed for the issue of reserve notes. Two factors combined to produce this result—the circumstance that many banks had placed their

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\*Report of the Secretary of the Treasury, December 7, 1914.



best paper with the national currency associations in order to protect emergency currency, and the further circumstance that the tax on this currency at the lower rate established by Congress would not, for some considerable time, be likely to approximate the rate of discount which every bank would have to pay to Federal reserve banks in order to get the rediscounts that would enable them to obtain the notes they needed. Combined with these factors was, of course, the natural inertia which in all such cases tends to prevent the withdrawal of one kind of currency and the issue of another. Upon the organization of the Federal reserve banks, moreover, the urgent pressure for note accommodation passed away as quickly as it had come. Gold reappeared in circulation at an early date, and the retirement both of the clearing-house certificates and of the emergency currency was undertaken. In those cities where rates of interest on clearing-house certificates were very high, the reserve banks aided in the retirement of the certificates remaining in circulation.

The emergency currency itself immediately began to be retired by its users, and by the end of June, 1915, had wholly disappeared. With

the lower rates of discount prevailing at the reserve banks, and with the continually heightening rate of taxation which the emergency currency had to pay, there was some conversion of the currency into Federal reserve notes, while the surplus reserves released by the Act aided retirement much more rapidly. Had the reserve banks been in operation at the beginning of August, they would naturally have supplied the great volume of currency which was called for; but not having done so, a field of business which would naturally be theirs was taken from them by reason of the fact that it was occupied by the clearing-house certificates and emergency notes.\*

\*First Annual Report of the Federal Reserve Board, p. 16.

## CHAPTER VI

### THE FEDERAL RESERVE "SYSTEM"

THE Federal reserve "system" is, in most general terms, as we have seen, a plan for the creation of a number of reserve institutions, each situated in an independent district and designed to act as a means of federation for the banks of the district. This "system" is frequently spoken of as if it were a peculiar product, different from anything else in banking experience. The question of its real nature is more than a mere political controversy: it is a matter which goes to the root of the principles upon which the whole plan is based. As we have elsewhere noted, the banking systems of the world may be generally divided into three classes:

1. The central banking systems, so-called, of which the French system may be taken as a fair example. In these a central banking institution acts as the holder of reserve money and usually as the sole issuer of notes for a nation.

Such a central institution may have a good many branches or may not. It usually deals, however, in the largest measure, with other banks, leaving these banks to do the business with individual customers. - This latter point is not a universal characteristic, as seen in the case of the Bank of France, which loans to individuals in very small amounts. Whether it does its work through direct loans to individuals or through intermediation of other banks, however, central banks of the kind already spoken of directly influence the market and practically control rates of interest.

② The independent-charter banking systems. Of these the Canadian is the principal example. The Canadian banks number about twenty-seven, and are nominally free competitors with one another, doing their work through the establishment of great networks of branches, interlacing throughout the community. Each of these institutions has the note-issue function and is essentially a central bank in the same sense that it controls a large reserve, issues paper currency, and is in position to shift capital from one part of the country to another. An added element of strength in the Canadian system is afforded by the fact that a joint guaranty

fund, applying to the notes of all failed Canadian banks, is established.

(3. The independent competitive banking systems, of which the American system is the principal. In the American banking system individual institutions have been chartered, both by the United States and by the several States, subject merely to some general requirements. Under this plan practically any one could organize a bank if he had a very moderate amount of capital. The consequence has been the creation of something like twenty-seven thousand banking institutions and trust companies, practically no branches being in existence.

For reasons which have already been sufficiently studied, the banking system of the United States has not been found satisfactory. Its good points in assuring equality of opportunity and competition, and in safeguarding against monopoly are well known, but it has been equally obvious that the system lacked the stability which was found under either of the other main classes of banking systems of the world already enumerated. The usual complaint against the system has been that it did not conform to European models or did not apply the results of experience. During the

banking reform agitation, briefly sketched in foregoing pages, nothing was more common than the constant suggestion that it was desirable to apply "scientific principles" in the development of banking, and to advance the American system along the lines which European nations had already tested. Since the Federal Reserve Act has been passed, the suggestion has often been made that it is a new and untried plan, and that it does not conform to the practice of the rest of the world much more perhaps than did the system of independent banks which preceded it. This question is worth very careful examination.

The feature of the Federal reserve system which has aroused most criticism from those who were opposed to it has been its so-called "regional" character—that is to say, the fact that an effort was made to establish independent institutions in different parts or sections of the country. This has been represented as an innovation without merit. In support of that contention it has been pointed out that in no other banking system is any heed paid to geographical divisions, but the central reserve-holding and note-issuing bank of each nation is given power to go ahead extending its opera-

tions as it deems best and welding the banking resources of the country as a whole into one. Somewhat further examination of the proposition, however, shows that the Federal reserve system with its series of independent banks is not so different from this "European" plan as has been thought by some. The area of the United States is about equal to that of Europe, including Great Britain and European Russia. So far as area is concerned, then, there would be room in the United States for a number of institutions corresponding to the total number of central banks throughout the European continent. The mere fact that international lines divide the Bank of France from the Bank of England or the Bank of Germany, has no relationship to the economics of the situation. It is a fact that no such extent of territory as the United States is dealt with by one single central bank. The Federal reserve system, with its series of reserve-holding institutions, therefore, does in fact correspond much more nearly to European practice than would a single central institution with branches. Each Federal reserve bank includes within its district a territory which, as the nation expands and its business increases, will rank with the territory

tributary to one of the European central institutions.

From a directly opposite point of view the Federal reserve system has been sharply criticised on the ground that it was too highly centralized and too much divorced from the people. Individuals, it is pointed out, cannot trade with the Federal reserve banks—cannot deposit or discount paper with them. The banks are, therefore, merely bankers' banks, it is said, and as such unable to furnish relief to the real borrower. There is undoubtedly some basis for this kind of argument. It is probable that central banks in other countries do their best work when they have a means of direct communication with the individual who needs funds for use in his business. The Federal Reserve Act undertakes to distribute some of this benefit through its provision for open market operations and its effort to create an open discount market in which Federal reserve banks may deal directly with the business public. Still, when all has been said, it is true that the Federal reserve banks discount only for member banks, and that in their ordinary operations they are bankers' banks.

Although admitting this fact, however, the



fair-minded critic will at once note that in many European banking systems where the public is technically granted access to the central or reserve bank for the purpose of depositing and borrowing, it is only in a comparatively small number of instances that the privilege is availed of, most of the business of such central banks being done by other banks which are engaged in the business of practical banking with direct relations with customers. This is notably the case in England, where it is true that many firms and individuals carry accounts in the Bank of England, but that the great bulk of the banking business of the nation is done with other banks which, in turn, transact their business, keep their deposits, and get their discounts at the Bank of England. It is the competition of these other banks that transfers the benefits of the work of the central bank to the public at large; and when there is any temporary obstacle to such transfers, the central bank, by going into the open market and making its rate effective, is able to facilitate the flow of its accommodations into the hands of the public. The statement, then, that the Federal reserve banks are in some way more widely divorced from or less accessible to the public than

is true of other reserve or central banking institutions, scarcely corresponds with the facts. Indeed, to have the system effective and make its operations real, conditions must be such as to transfer the consequences of its policies to the average man as directly as possible. In a country where any five persons possessing \$25,000 in capital, subject to certain population limitations, can organize a national bank, there should be no great difficulty in securing the benefits of operation of the central note-issuing system.

From neither side of the situation, therefore, can it fairly be asserted that the Federal reserve banks are anomalous institutions or that they are out of harmony with the methods of banking organization which experience has approved. On the contrary, they are much more nearly in harmony with such methods than were the proposed institutions and expedients which preceded them, such as the National Reserve Association provided for in the Aldrich or Monetary Commission bill. What has thus been said with reference to the Federal reserve system in its abstract aspects must, however, be qualified to this extent—it will be true only in the event that the members of the system include practically all of the commercial

banks of the country or, at all events, a substantial proportion of them. The inclusion of such a large proportion of commercial banks was seen from the first to be necessary, because of the necessity of making the institutions sufficiently strong to be effective. Consequently, national banks were required to enter the system under penalty of being obliged to go into liquidation and surrender their charters. It was seen, however, from the outset, that the limitation of the system to national banks only might not be a good thing. If State banks continue to be as numerous and as powerful as at present, and to include within their scope a good deal more than one half of the banking capital of the country, it was desirable to get them into the new system. This could be done only by providing for another class of members of the system and holding out to State banks the necessary inducement to bring them in. It is evident that the larger the percentage of all the banks which become members of the system, the more nearly will it be true that facilities have been afforded to all classes of business men and borrowers for obtaining the advantage which comes from organization and combination. Up to date only three hundred and two banks, in addition to

those already in, have entered the system since the passage of the Federal Reserve Act; two hundred and eighty-four of these by organizing as new banks, or converting from the various State systems, and eighteen by becoming members of the system while retaining their State bank charters. The extent to which the system will be able to draw to itself the State banks generally is still to be determined.

Just here, however, a word of special caution is required. Some of those who have been most desirous to extol the virtues of the Federal reserve system very widely have been in doubt whether the indiscriminate admission of State banks would be wise, even where the institutions applying for admission were safe and sound and absolutely free of criticism. It has been pointed out that the Federal reserve system is essentially intended for and composed of commercial banks, and that such institutions as savings banks, some classes of trust companies, and in general all banks which devote their chief attention to investment rather than to discount and commercial lending, will be an element of weakness rather than strength in the system. There is something to be said for this point of view, and from the standpoint of

the non-commercial institutions it would appear that there is comparatively little inducement to submit to the restrictions and incur the expenses involved in membership in the system because the benefits accruing from it—apart from the mere “insurance” feature—are by no means as large as in the case of the commercial banks. Experience will be needed to furnish a complete demonstration of what can be done in drawing into the system the different classes of State institutions. It may be said in general terms that when the system is complete it will include as its central core the national banks of the country, while outside them will be a larger or smaller body of State institutions, so selected that their functions will be similar in essentials to those of the national bank members. There will be no discrimination between the national bank members and the State bank members, except in so far as one class of institutions more than the other succeeds in conforming to the rules governing commercial banking, and so in getting the advantage, in a greater or less degree, of the provisions of the Federal Reserve Act which, of course, are essentially founded upon commercial banking ideas.

A further development of the system, which

will necessarily come as the new banks are more and more firmly established and as their business becomes larger and larger, is the establishment of branch banks. As seen from the map already presented, some of the Federal reserve districts are very large. Some include several points which are sufficiently important as business centres to warrant the creation of independent banking units. Still others are so laid out, geographically speaking, that it is hard to manage the affairs of the whole district from one single point. In all such cases the natural development to be expected will be the establishment of branch reserve banks. These branches will be in practically all particulars ultimately identical in function with the parent banks. Their local boards of directors will, however, be able to determine with greater accuracy than the directors of the parent institutions the amount of credit to which would-be borrowers are entitled, while they will be able to handle more quickly than the parent institutions checks and other items originating within the respective districts, and requiring to be cleared on the books of the banks. From the standpoint of structure or organization, therefore, it may be expected that in the near future a series of branch

institutions will develop. Only one of these has as yet been provided for—at New Orleans—and it is still uncertain whether in creating a branch within a given district an independent territory will be assigned to such branch, or whether it will be permitted to do business with any member bank throughout the district which may choose to resort to it rather than to go to the head office of the parent institution. The New Orleans branch has been tentatively assigned a distinct territory. There are some questions connected with this situation that may turn out decidedly interesting. If a number of branches should be established in any given district, the outcome of their creation would seem to be either that the Federal reserve bank of the district would become a central office, taking charge of their affairs in general, and overseeing them (but probably not doing much business itself, the actual work being done at the branches), or else that it would practically assume a status coördinate with that of its own branches. Indeed, if in some districts it should happen that branches were more successful in directing business to themselves, while the parent institution had perhaps been erroneously located in the first instance, the latter

might be placed in an embarrassing situation because of the fact that its subordinate branches were getting more actual business than the home office. All this is a question which must be determined largely on the basis of experience. There are no definite canons of theory and certainly no provision in the Act itself that would control the disposition of such issues.

A final element in the development of the Federal reserve system which is likely to be ultimately of very much importance is its expansion abroad. In two ways the new Act calls for the extension of the system in foreign countries—it permits member banks to apply for and receive under certain conditions permission to establish branches of their own abroad; and it provides for the establishment of agencies and offices of Federal reserve banks themselves abroad. The powers granted by the Federal Reserve Act with reference to foreign operations of Federal reserve banks are very large, and it would appear that the foreign agencies or offices of the reserve banks might practically engage in any class of business they chose (always provided it was of a commercial and short-term character), dealing with individuals, firms, or corporations, at will. This situation opens up a large pos-



sibility in the development of foreign banking upon a scale commensurate with and similar to that which is characteristic of foreign banking institutions. Up to date absolutely nothing in this direction has been done, for the reason, among others, that financial conditions in European countries are as yet too disturbed to permit of any serious exploitation of the field there with a proper measure of safety. In time, however, the reserve banks will naturally establish offices abroad if only for the purpose of dealing with the question of foreign remittances. When that time comes the question will necessarily be raised whether such offices shall be general offices, acting for the system as a whole, or whether they shall represent Federal reserve banks individually. The former alternative is the one which would seem to be indicated by the logic of the case. It may be expected that on some basis of coöperation the Federal reserve banks will, therefore, create joint offices in those financial centres particularly where it is desired to operate, and that these joint offices will handle for the several reserve banks such operations as various institutions may see fit to commit to their charge. Disturbed foreign conditions and depression of business at home

have likewise restricted the growth of foreign branches of American banks, only a few having thus far been authorized by the Federal Reserve Board. As foreign trade advances, however, it is reasonable to expect that many large American institutions will establish branches in other countries; and this will not be a movement in competition with the branches of the Federal reserve banks. There will naturally be the same distinction between the kind of business done by branches of reserve banks and branches of member banks abroad as between the operations of reserve banks at home and member banks at home. Member banks will engage in many types of operation which are not appropriate for reserve banks, while reserve banks will limit themselves rigidly and closely to short commercial paper and will not be able to engage in financing or in promoting enterprises of any kind.

(b)

## CHAPTER VII

### THE FEDERAL RESERVE BOARD

THE Federal Reserve Board is the central controlling and directing mechanism of the Federal reserve system. Under the terms of the Act it is appointed by the President, by and with the advice and consent of the Senate, subject to the following limitations:

1. No two members of the Board can be chosen from the same district;

2. Each member must have been a bona-fide resident of the district from which he is appointed for two years preceding his appointment;

3. Two members of the Board must be men of practical experience in banking and finance.

Subject to these limitations, the President, with the confirmation of the Senate, appoints five persons of his own selection. These, together with the Comptroller of the Currency and the Secretary of the Treasury, make up the Federal Reserve Board. The Secretary of the

Treasury is ex-officio Chairman of the Board, but the Board has always a chief executive officer, known as the Governor, and a second executive, similarly named, and known as the Vice-Governor. The Board has power to adopt its own by-laws, rules of operation, and the like, and to select its own place of meeting. The powers of the Federal Reserve Board are specifically enumerated in Section II of the Act, but either by incidental mention or by necessary implication, various other grants of authority are related in other sections. They may be enumerated as follows:

To readjust districts created by the Organization Committee and create new ones.

To regulate the establishment of branches of Federal reserve banks.

To designate three (class C) of the nine members of the Board of Directors of each Federal reserve bank, one of these to be Chairman of the Board with the title of "Federal Reserve Agent."

The Federal Reserve Agent to maintain a local office of the Federal Reserve Board on the premises of the Federal reserve bank. He shall make regular reports to Federal Reserve Board and be its official representative.

To remove any director of class B (business men) if it should appear that he does not fairly represent

the commercial, agricultural, or industrial interests of his district.

To remove officers of Federal reserve bank with due notice.

To establish rules governing applications from State banks and trust companies.

To levy a semi-annual assessment upon the Federal reserve banks for estimated expenses for succeeding six months, together with deficit carried forward.

To examine at its discretion the accounts, books, and affairs of each Federal reserve bank and to require such statements and reports as it may deem necessary.

To require, or on application to permit, a Federal reserve bank to rediscount the paper of any other Federal reserve bank.

To suspend for a period not exceeding 30 days (and to renew such suspension for periods not to exceed 15 days) any and every reserve requirement specified in the Act.

To supervise and regulate the issue and retirement of notes by Federal reserve banks.

To add to the number of cities classified as reserve and central reserve cities under existing law in which national banking associations are subject to the reserve requirements set forth in Section 19 of the Act, or to reclassify existing reserve or central reserve cities and to designate the banks therein situated as country banks, at its discretion.

To require the removal of officials of Federal

reserve banks for incompetency, dereliction of duty, fraud, or deceit.

To require the writing off of doubtful or worthless assets upon the books and balance sheets of Federal reserve banks.

To suspend the further operations of any Federal reserve bank and appoint a receiver therefor.

To perform the duties, functions, or services specified or implied in the Act.

To determine or define (subject to stipulation) the character of paper eligible for discount for member banks.

To prescribe regulations for purchase and sale by Federal reserve banks of bankers' bills, etc.

To review and determine the rate of discount established by Federal reserve banks.

To authorize establishment of branches of Federal reserve banks in foreign countries.

To establish rates of interest on notes issued.

To prescribe regulations for substitution of collateral.

To make and promulgate regulations governing the transfer of funds at par among Federal reserve banks.

To act, if desired, as clearing-house for Federal reserve banks.

To require, in its discretion, Federal reserve banks to act as clearing-houses for shareholding banks.

To require extra examinations of member banks when deemed necessary.

To determine and report annually to Congress fixed salaries of all bank examiners.

To arrange for special or periodical examinations of member banks for account of Federal reserve banks.

To assess upon banks in proportion to assets or resources the expenses of special examinations.

To receive from Federal reserve banks information concerning the condition of any national bank in the district.

To receive applications from national banks having \$1,000,000 or more capital for the establishment of branches in foreign countries, or reject or accept such applications and to prescribe conditions under which such branches may be opened.

To require examinations of foreign branches as it may deem best.

The Federal Reserve Board has been in existence at this writing for less than a year. A part of that time has been consumed in the performance of ~~emergency~~ duties growing out of the critical situation resulting from the European war. These have been reviewed in Chapter V, foregoing. Such duties have, however, no necessary relationship to the regular functions of the Board as the central mechanism of the Federal reserve system, and must be regarded as merely a type of public service incidental to the organization and inauguration of

the new reserve institutions, and not a regular feature of administration. Under it, it is to be hoped, and with the Federal reserve system in full operation, emergency measures of the kind that were necessary after the outbreak of the European war will no longer be found requisite.

The permanent and regular duties of the Federal Reserve Board outlined above may be considered under three general divisions:

- (1) Administrative.
- (2) Constructive.
- (3) Educative.

We may first address ourselves to the administrative functions of the Federal Reserve Board. These administrative functions are essentially of two kinds:

- (a) The regular and recurring duties necessary to the operation of the system, and
- (b) The sporadic or occasional duties which grow out of the operation of the Act, but which do not occur at any definite time or times.

Of the regular and stated duties of administration, probably the most conspicuous is that of regularly approving discount rates when submitted by the several banks. To do this work intelligently involves careful study and consider-



ation of the general business conditions throughout the nation, of the situation in each of the reserve districts themselves, and of the broad general outlook for the future. An incidental consideration is necessarily that of the earnings of Federal reserve banks, and the degree in which it is necessary or desirable to enlarge those earnings through the taking on of more business. Another administrative function, practically continuous in its operation, is that of granting to banks power to enlarge their acceptances of paper up to 100 per cent. of their capital and surplus, and of extending to them the right to exercise the functions of trustee, executor, administrator, and the like. Under the terms of the Federal Reserve Act these powers cannot be conveyed except by special permit, and any member bank which desires to make use of them must, therefore, obtain the consent of the Board. Under the system which has been laid down by the Board this involves an application first of all to a local Federal reserve bank, and when such an application has been approved, the Board is in position to take action, either confirming or disapproving the findings of the Federal reserve bank which had passed upon it. So also, under

the terms of the law, it is required that each Federal reserve bank shall submit to the Federal Reserve Board statements of compensation paid to officers and directors that they may be approved by the Board. This naturally implies a study of proper rates of compensation, and the taking of action designed to fix such rates when occasion demands. Once established, the salary lists of the Federal reserve banks are not likely to show extensive changes, but such alterations as there are will recur and require attention from time to time.

Other administrative duties must likewise be performed, among them the passing upon and approval of applications for and surrender of capital stock in Federal reserve banks, the holdings of the member banks varying according as their own capitals and surpluses increase and decrease. These, however, are for the most part technical, and no further enumeration is necessary.

The constructive duties of the Board prescribed by law are seen to best advantage in the provision which calls for the development and application of regulations designed to control methods of business. Since the Board was organized it has issued regulations defining com-

mercial paper eligible for discount, regulations relating to the definition of savings accounts, rules for the issue and retirement of capital stock, for the purchase of warrants and bankers' acceptances in the open market, and a variety of others. These regulations govern the practice of the Federal reserve banks, and have substantially the force of law inasmuch as the Federal Reserve Act itself calls for the exercise of these functions subject to the rules made by the Board. Inasmuch as the character of the rules and regulations thus made may gradually alter the scope and methods of business done by the banks, it is clear that the work of the Board in this regard is in the highest degree constructive in its nature. At times it is almost equal to the extensive limitation or modification of the provisions of the law itself. It is difficult to say how far, when the system is fully perfected, it will be necessary for the Board to work out such regulations. A reasonable expectation would seem to be that, after the lapse of a moderate period of time, the banks would become fully possessed of their reserve holdings, while their experience would also have demonstrated the lines along which they must work in the performance of their business.

When such experience has been accumulated, and the system has definitely been set in working order, it may be expected that the regulations of the Board will be changed but little, and that any modifications will be the outcome of observation and experience of banking and business conditions throughout the nation. By changes in the discount rate the volume of business will be controlled; but the methods of business at the banks, which are dependent upon the regulations aforesaid, will not be altered greatly. At present the Federal reserve system is still in process of development, and its business practices are being analyzed. This has necessitated more or less frequent changes in regulations, but such changes, as already indicated, will diminish in number as time goes on. The Act has also placed in the hands of the Federal Reserve Board the power of changing and readjusting the reserve districts, subject to the broad general requirement that there should not be less than eight nor more than twelve. How extensive such readjustments of the districts will be experience must show; and when the time comes to make them, an important constructive function of the Board will be that of determining when and how they shall be intro-

duced. Already the Board has granted three petitions for readjustment of boundary lines between districts. Of the same general character is the provision of the Act which calls for the establishment of branches, and which practically vests the Board with the authority to oversee the establishment of such branches of Federal reserve banks. Plainly the operation of the law in this particular will mean that the broadest use and development of the system and its branches, the establishment of agencies abroad, and other functions of the same general description, will be entrusted to the Board, and will constitute one of its most important duties of a constructive nature.

3. Among the implied or educative duties of the Board is undoubtedly that of bringing about general and harmonious action among the several districts and the welding of the different parts into a consistent united whole. In order to do its work well the Board must necessarily be in close touch with the several districts and what is going on in them, and with this purpose in view, direct communication with the different districts has been entrusted to the several members of the Board in order that they may keep themselves and their colleagues advised

of any developments in these districts which call for special attention. An annual report to Congress was required by law and must be formulated by the Board, but it is also entrusted with the duty of keeping the country advised of the condition of the system. It has undertaken to carry out this duty in part by the establishment of a publication known as the *Federal Reserve Bulletin*, in which are collected notices and statements about the work undertaken and the results accomplished in the operation of the system. Much more might be said of the detailed work of the Board in educating the public to a knowledge of its operations and of standardizing banking practices, but the statements already made practically cover the ground in its most essential aspects.

The Federal Reserve Act imposes practically no limitations upon the methods by which the Board performs its own work. In accordance with the provision of the law which authorizes the Secretary of the Treasury to provide quarters for the Board in his department, the main offices at Washington have been located in the Treasury building. While there is no rigid practice, it has been customary to hold meetings from three to five times a week, usually

each day, although during the period of organization two meetings a day were not uncommon. A set of by-laws defining the organization of the Board was early adopted, and these provide for an Executive Committee whose function it is to transact all necessary business not involving any new departures of policy. When the members of the Board are practically all present in Washington, stated meetings on Monday, Wednesday, and Friday, with Executive Committee meetings on Tuesday and Thursday, are the rule, while other committees may meet occasionally as convenience dictates. Sessions of the Board are held in private, and thus far no public sessions, with the exception of the hearings on appeals from decisions of the Reserve Bank Organization Committee, have been appointed. When a decision has been arrived at with reference to a proposed change in the discount rate, or the adoption of any new policy or method of business, the Federal reserve agents are at once advised by telegraph or letter, and then the decision is communicated to the various Federal reserve banks. The Federal Reserve Agent is regarded by the Board as its representative on the ground, and, as such, to be the official medium of communication be-

tween it and the bank to which he is accredited, although the Board may, and frequently does, hold direct communication with the Governor of the Federal reserve bank as being the active operating officer.

As already stated, the Comptroller of the Currency is a member of the Federal Reserve Board. The Federal Reserve Act did not change his function as chief of the national banking system, or his responsibility to the Secretary of the Treasury and to Congress. These relationships, therefore, continue, and his presence on the Board simply serves to establish a connecting link between the supervision of the national banking system as such, and the general supervision of the Federal reserve system, including Federal reserve banks and such non-national banks as may have become members. In the same way the Secretary of the Treasury's membership in the Board in no way alters his other relationships or duties. The fact that he presides over the Board enables him to communicate to it necessary information with reference to the policies of the department on financial and banking questions, and to receive from it advice and information concerning the work of the reserve system. Under the Federal



Reserve Act the placing of public deposits in the reserve banks is left entirely in the hands of the Secretary of the Treasury, although the Act distinctly contemplates that such deposits shall be made and that the reserve banks shall ultimately assume that place as agents of the Government. When that step shall have been taken, the membership of the Secretary of the Treasury on the Federal Reserve Board will have an additionally distinct and direct practical importance by creating an effective communication between the revenue department of the United States Government and the banks as holders of the funds. The membership of the Secretary of the Treasury in the Federal Reserve Board will, under those conditions, be of increasing significance, and will include much more than the mere rendering of advice and suggestions. It will of necessity be a constant working participation on the part of the Secretary of the Treasury in the affairs of the Board, and, conversely, a participation on the part of the Board, as a conservator of the banking resources of the country, in the operation of the Treasury Department.

In organizing its staff at Washington for the performance of the duties already enumerated,

and others incidental to them, the Federal Reserve Board found it desirable to recognize several distinct divisions. The task of examining member banks (not national) and of making periodic examinations of Federal reserve banks has been committed to a distinct bureau or division known as the Division of Audit and Examination, headed by a chief under whom is organized a small corps of examiners and assistant examiners. The task of examining the twelve Federal reserve banks would not in itself be a heavy one, but as State banks enter the system, the duty of ascertaining whether they are in suitable condition for admission, and of making sure that they continue to be so, will involve a considerable amount of labor.

Another of the main divisions into which the Board's work is divided is that of Reports and Statistics. When the Federal Reserve Act was drawn provision was made for a weekly report of the condition of all Federal reserve banks and of each bank, showing the main items in their accounts. This is prepared in the Division of Reports and Statistics from data which are weekly telegraphed to the Board and are combined to make up the final statements. Provision was also made when the Federal re-

serve banks were organized for regular reports by the several banks of paper purchased, with name of purchaser, maturity, rate, etc. Complete lists, showing all these items of information and giving data as to the daily condition of the several banks, are daily forwarded to Washington by each one of the institutions; and it is the duty of the Division of Reports and Statistics to combine and analyze them and to prepare the result of the study in such form for examination by members of the Board as will aid them in forming conclusions regarding the business of member banks, as indicating necessary changes in rates of discount, and as otherwise determining the policy to be pursued in the general conduct of the banking system.

In the Federal Reserve Act it was specified that each Federal reserve bank might act as a clearing-house for its members, but that the Federal Reserve Board itself might act as a clearing-house for the Federal reserve banks, or might designate one of the Federal reserve banks thus to act. In pursuance of this authority, the Board has established a Division of Clearing in Washington for the purpose of settling balances between Federal reserve banks without the actual shipment of coin. This di-

vision is in charge of a fund of about \$50,000,000 in gold, and conducts a set of books on which are recorded from week to week credits and debits between Federal reserve banks arising out of their operations during the week. As given banks are credited or debited on these books the amount of their ownership in the Gold Fund changes. No gold is shipped unless a Federal reserve bank has exhausted its balance in the Gold Fund, and even under those conditions no such shipment need occur if the bank which has become indebted to one or more of the others chooses to obtain from them loans or discounts sufficient to cancel its obligations for the time being and afford it an opportunity to recover its ownership in the Gold Fund through the coming in of more claims in its favor upon other Federal reserve banks.

A Correspondence Division has charge of the general clerical work required in communicating with Federal reserve banks and the public; while a Division of Issue—in charge of the issue of Federal reserve notes—was at first organized under the direction of the Comptroller of the Currency, but is supported and controlled by the Board, its function being that of receiving, counting, packing, and shipping notes; the detail

of this work so far as relates to new notes being later transferred to the Bureau of Engraving and Printing, which disposes of it as with all other shipments of Government currency.

## CHAPTER VIII

### THE FEDERAL RESERVE BANK

IN ITS outline of organization, its methods, and the theory upon which it is based, the Federal reserve bank is in no respect different from the ordinary bank. In a general way, the organization of the ordinary commercial bank consists of three divisions—one for receiving deposits of funds from the public, one for passing upon commercial paper and extending loans of such funds to the public, and one for keeping records and accounts of the resources and liabilities of the institution. Naturally there are many variations upon this small type of organization. In the large bank of to-day a great variety of so-called “departments” is found. The task of receiving deposits and of paying out cash is greatly subdivided. Foreign exchange is usually a quite separate and distinct department of banking with its own organization and personnel. In some large banks especially trained men are placed in charge of different

geographical divisions of the bank's work. "Out of town" and "in town" accounts are segregated, both as to bookkeeping and management, and in many other ways the organization is refined upon in the interests of efficiency and economy. All this does not alter in any way the fundamental fact that the three primary divisions of bank organization are as indicated. They are found in the Federal reserve bank just as in the ordinary commercial bank.

In two important respects, however, the Federal reserve bank organization is peculiar. These are as follows:

(1) Owing to its close relation with the Government each Federal reserve bank has a special officer representing the Government, who is chairman of its Board of Directors and who is designated as "Federal Reserve Agent."

(2) Every Federal reserve bank confines its discount business to other banks, a fact which at once alters the type of organization of the institution in some important particulars.

We may now survey the outline of organization of the Federal reserve bank as such. The fundamental control of the institution is in the hands of the Board of Directors, consisting of nine members. This Board of Directors con-

sists of three classes, each containing three members and each class being designated by a letter, as A, B, and C. Class C directors are nominated by and represent the Government. Class B directors are business men not engaged in banking, who are presumed to represent in a general way the industrial, commercial, and agricultural interests of the district in which the bank is situated. Class A directors are directly representative of the banks. Both Class A and Class B directors are chosen by the banks, and for the purpose of this selection the banks in each district are divided into three groups: group one chooses one Class A and one Class B director, group two the same number, and group three the same. In group A the voters or electors are the banks of large capitalization, group two those of medium capitalization, and group three the small banks. The chairman of each Board of Directors divides the banks of the district into these three groups in such a way as to place an approximately equal number of banks in each. Each bank has one vote, irrespective of its size. The group division, however, prevents the small banks from electing men who represent them exclusively and insures approximately equal repre-



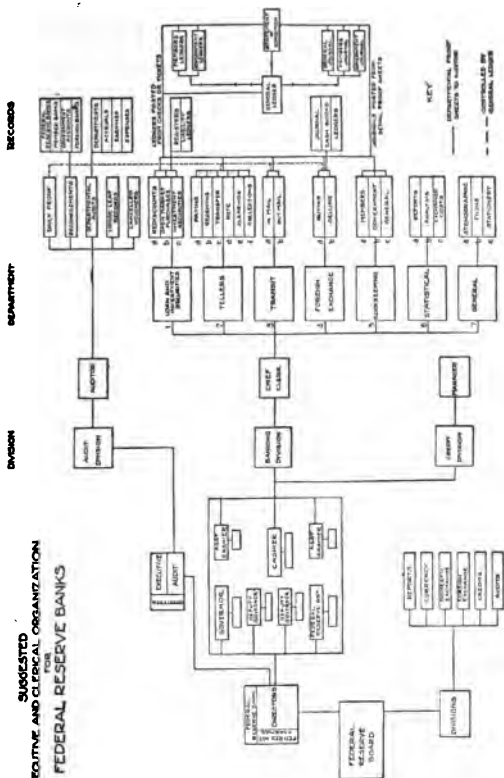
sentation to banks of somewhat greater size. The directors in question are appointed for equal terms of three years each, but these terms are so arranged that three directors go out of office each year, thus insuring opportunity for rotation. The chairman of the Board of Directors is designated by the Government and is the Federal Reserve Agent of the bank. A vice-chairman, with the title of Deputy Federal Reserve Agent, is also designated by the Government. These two officers are of the number of Class C directors. The remaining Class C director, sometimes described as the "unattached" director, has no specific functions other than those assigned to any director of the bank.

Reference has already been made to the Federal Reserve Agent. As chairman of the Board of Directors, his function is to preside over meetings of the Board, and in general perform all those functions of organization which ordinarily fall to the chairman of any deliberative body. As representative of the Government in his capacity of Federal Reserve Agent as such, he communicates with the Federal Reserve Board and transmits communications from that body to the bank. He also acts in a fiduciary capacity, receiving from the Board at

Washington the notes ready for circulation in such amounts as the bank deems to be necessary, and issues or transfers these to the bank whenever the institution has placed with him, for the special protection of such notes, commercial paper of the kinds specified in the Federal Reserve Act as eligible for rediscount. It is his duty to report regularly to the Federal Reserve Board upon prevailing banking and commercial conditions in his district and to inform the Board of any special or unusual conditions demanding attention from the governing body. An important function which falls to the Federal Reserve Agent is that of advising the Board, whenever necessary, that the bank desires to change the rate of discount on commercial paper. If such application for change is approved, the reserve agent notifies his bank and announces the rates thus newly fixed to the public. Beyond these definite and well-recognized functions, the duties of Federal Reserve Agent vary somewhat from bank to bank, according to the personality of the agent himself, as will be presently set forth.

In each Federal reserve bank the Board of Directors, acting upon a suggestion originally sent out by the Federal Reserve Board, has

named an officer of somewhat coördinate power with the chairman of the Board, giving to such officer the title of Governor. The Governor of a Federal reserve bank is the active operating officer of the bank itself as thus organized. It is his duty to attend to all of the details relating to actual banking, supervising the loans, controlling the personnel, and in general carrying out the instructions of the Board of Directors, whatever they may be. In some cases governors of Federal reserve banks have been more highly paid than Federal reserve agents, and the impression has gained ground on that account that they were of superior rank. There is no basis for any such supposition. The Federal Reserve Agent, as chairman of the Board of Directors of his respective bank, and as a Government representative, has a distinctive status of his own and acts in an advisory and representative capacity. The governors of the banks are executives dealing with the daily operations of lending and collecting funds. Their functions are different from those of the reserve agent, and in no way conflict with them. One reason why they have frequently been given higher salaries than Federal reserve agents is that the Federal Reserve Agent being a





Government appointee, was naturally subject to all those restrictions and limitations which surround the compensation of Government officers. The governors of the banks, on the other hand, were employed on a commercial basis for the most part, and their salaries were fixed upon somewhat the same terms as would have been the case had they been entering the employ of an ordinary commercial bank.

The internal organization of the typical Federal reserve bank may be conveniently set forth in the accompanying chart, which was recommended by the Federal Reserve Board at the time the new banks were opened as a general outline which might be followed in establishing them. Every bank has or may have, under the direction of its board and governor, a subordinate officer known as a vice-governor or deputy governor, whose function is that of taking the place of the governor when the latter is absent, or assisting him in prescribed duties. Most banks have appointed a cashier and a secretary. The latter keeps the minutes of the Board of Directors and assists in executive duties. In some cases he is also counsel of the bank, an individual in such cases having been selected who was known to be sufficiently well trained in

the law to act as counsel. The cashier has charge of the tellers, bookkeepers, and other officers, whoever they may be, that are employed by the bank. The number of these officers and employees varies considerably according to the size and volume of business of the institution. In some cases the work of the bank is sufficient to call for the maintenance of a relatively large staff of accountants, clerks, and other subordinates; in others, only a skeleton staff is needed. The principal point which dictates an organization different from that of the ordinary commercial bank is that relatively little cash is deposited or drawn out over the counter. In most districts the greater number of members are outside the city in which the bank is situated, and in many the bulk of the transactions of the bank are with out-of-town members. Demands for cash and direct deposits of the same over the counter are naturally much less frequent than with the member bank. Details of bookkeeping are also much simpler than with the ordinary bank, because the number of customers is limited to the number of member or stockholder banks, Federal reserve banks being prohibited from doing a deposit or loan or discount business with any except their members and the

Government of the United States. As yet the Government of the United States has not become a depositor in Federal reserve banks, but the expectation is that it will before long transfer the bulk of its funds to Federal reserve institutions and then pay its obligations by drawing checks and drafts upon them, thus giving them the use of its current funds and receiving from them the service involved in making transfers and settling obligations.

While the internal organization of the typical Federal reserve bank is thus in its outline substantially similar to that of the commercial bank, there are certain phases of the work of the reserve banks that differentiate them quite sharply from commercial institutions. In the ordinary bank a great deal of the hazard or risk resulting from the operations of the institution is due to uncertainty as to the goodness of the loans that are made and doubt as to the character of the paper. The shrewdness and acumen of the ordinary bank president and his immediate aides is exerted in determining whether given individuals who want to borrow are "good," and, when satisfied that they are "good," in ascertaining whether they will be able to pay at the time they say they will, or whether they



will have to be "carried" beyond that date, by extending their loans, in order to enable them to gather their strength and get in the cash needed to pay off the bank. The Federal reserve bank must meet a problem which in this respect is different from that presented to the ordinary bank. It discounts no paper without the endorsement of a member bank, which means that the paper thus offered for rediscount by the Federal reserve bank has passed under the scrutiny of the officers of the member bank and is endorsed or guaranteed by them. This means that if the maker of the paper does not pay at maturity the member bank must make good the shortage. The commercial side of the bank's work is thus considerably simplified. It can delegate to the member bank a large part of the task of passing upon the value of the signatures of the borrowers, the examination of their statements, their business condition, and the like. Only in those cases where a borrower has so large a volume of paper outstanding in the hands of so many different banks as to make the problem of his responsibility greater than can be dealt with by any individual bank or group of banks, does this question of testing his liability become really a problem for the Federal reserve bank

itself to deal with. In another way, however, the Federal reserve bank has a highly special function which is not performed by the commercial bank. This is the duty of testing the validity of the total volume of bank credit and of ascertaining whether in the aggregate the banks of the community are going too far in extending their loans to their customers. Such an over-extension may make itself evident in either of two ways: it may be seen in the presentation to the Federal reserve bank of a great deal of paper originating with the same makers which has found its way into the portfolios of various banks and has by them been offered for rediscount in the ordinary course of business, or it may be seen in the fact that given member banks, although not necessarily becoming burdened with too great a volume of paper coming from an identical source, are obtaining from Federal reserve banks accommodations which constitute too large a percentage of their capital, i. e., which involve a contingent liability bearing too great a proportion to such capital. To reach this determination accurately requires a general survey of the banking field, knowledge of the general business conditions to which the various member banks are subject, and broad

analysis of the bank credit situation generally.

This is the primary "central banking" function—the determination whether in a given district or country bank credit as a whole is being too largely extended as compared with the available means for liquidation, without an undue amount of renewal. The commercial bank does not concern itself primarily with questions of this class, but is chiefly interested in its own profits and is disposed to go as far as it feels that it can in making loans without bringing its own solvency into jeopardy. No doubt there are large and public-spirited institutions, more or less international in the scope of their operations, which take a broader view of their relation to the community than this, but it is not unfair to say that the rank and file of the bankers hardly feel called upon to look beyond the immediate welfare and solvency of the institutions in which they are immediately interested. The Federal reserve bank must, however, take the broader view, since the primary purpose of its organization is that of supplying the elements of coöperation and conservation of resources.

In studying the typical Federal reserve bank the question naturally arises whether a Federal reserve bank is an isolated or independent insti-

tution or whether it is a branch of a great central institution. Closely connected with this point is the other question, whether a Federal reserve bank is "autonomous" or whether it is subject to control. We may get at a clear notion of the practical answer to both of these questions by looking analytically at the facts concerning the Federal reserve system that have already been set forth. The Federal reserve system consists of twelve distinct districts which are separately capitalized and separately organized, in each of which there is a separate Federal reserve bank. This at once shows what the framers of the Federal Reserve Act intended—that there should be a number of independent reserve institutions locally operated. While this was the manifest intention of the framers, however, it is occasionally stated that none of these banks can work without the other, or that all are parts of a general whole. Herbert Spencer has stated that the different individuals in human society are more closely connected with one another than the cells of the human brain, and in this sense the Federal reserve banks are undoubtedly closely united. There is no reason to question the closeness of the relationship in this sense

between Federal reserve banks. The same, it may be added in passing, is true of the relations between member banks and between the banks of one country and those of another. In another sense, there is no necessary connection between two reserve banks. It is not requisite that there should be a "financial centre" either for the United States or for any other country, nor is there any inherent reason why the existence of such a centre should give to that centre controlling power or authority over other points. Where "financial centres" have been built up in the past this has been the result of the depositing of funds from outside. The removal of such funds when convenience dictates merely transfers the centre elsewhere. It is quite true that some parts of the country are so-called "borrowing areas" and others are "lending areas," just as some nations are to-day borrowers and others lenders. The fact that some parts of the country have funds which they are in position to lend to others does not necessitate their exerting any control over the banking machinery in the borrowing sections of the country, but simply means that there is need of a reliable method of regulating the quantity of capital rendered by these parts of the

country and by them used in carrying on business. Such a regulator is furnished by the Federal reserve banks, and their function is that of determining jointly how great an advance of capital in this way is needed and how much can safely be used. The Federal Reserve Act expressly provides that the several banks are to be independent of one another. It prohibits their keeping deposits with one another except in so far as may be necessary for exchange purposes—the collection and cashing of items between districts. It may be said in summary, therefore, that the reserve banks are entirely independent of one another, so far as actual control or influence is concerned, so far as relates to the mechanism for electing officers, and in every other particular except in so far as they may choose to do business with one another as two independent business concerns of the same kind might.

The Federal Reserve Act is very precise in its definition of the relations between Federal reserve banks and the Federal Reserve Board. In a general way the Board is vested, as is elsewhere seen, with the power to oversee general banking policies, while the work of banking—its professional side, its technique, and its man-

agement—is placed in the hands of the officers and directors of each bank itself. The banks are protected against undue control by the Board by reason of the fact that the Board's powers are precisely and carefully defined, and while they are large, there can be no reasonable doubt as to their definite limits. The banks, in short, have all those banking powers that are not expressly mentioned in the Federal Reserve Act or directly implied as having been vested in the Federal Reserve Board. What the latter are have been fully discussed elsewhere. Except in so far as limited by this expressed authority, each Federal reserve bank is an autonomous institution, responsible for its own acts and conducting its business in its own way. It is neither a branch of a central organization nor of any other Federal reserve bank. There is nothing, either in the Federal Reserve Act or in the regulations of the Federal Reserve Board, to indicate that the reserve banks are to be operated in groups or through communications with one another, resulting in the establishment of a single policy as to detail. Neither is there anything to prevent officers of Federal reserve banks from communicating with one another, getting such information as can

be exchanged by that means, or adapting their own policies as the circumstances and business needs of each district or of all appear to require. As the system itself becomes better established and as the underlying thoughts of the Federal Reserve Act become better understood, it may reasonably be expected that the member banks in each district will more and more appreciate the advantages of being able to control their own affairs and will direct them with greater intelligence and independence. The Federal Reserve Board supplies the necessary link between the several banks, insuring joint coöperation when necessary and uniformity of practice and procedure so far as that is at all requisite, while in no respect withholding or limiting the opportunity of adapting the various regulations to special local conditions.



## CHAPTER IX

### TYPES OF COMMERCIAL PAPER

IN THE course of recent banking discussion a good deal has been said about what is called "commercial paper," and frequent references to the subject are found in the circulars and regulations published by the Federal Reserve Board. The Federal Reserve Act gives to the Federal Reserve Board the right to define the meaning of commercial paper. This is of the utmost importance, inasmuch as the terms of the law make the Federal reserve notes rest upon commercial paper, which is the type of security eligible for deposit with Federal reserve agents in order to protect Federal reserve notes. In defining such paper, therefore, the Federal Reserve Board practically settles the volume of paper eligible for use as a backing for notes, and so, in a sense, determines the upper limit of the volume of notes which may be put out.

In order to understand the precise effect of the provisions of the Act in this regard, it is

necessary, therefore, to consider the principal types of commercial paper and their relation to the operations of banking. This, in turn, necessitates a preliminary consideration of the bank loan. The simplest type of bank loan is seen in the case where an individual who desires to get funds requests accommodation from his bank, and, being favorably received, gives the bank his own note, signed by himself alone, running, say, for ninety days. If the discount rate is 6 per cent. per annum, this would mean that the individual paid  $1\frac{1}{2}$  per cent. for the accommodation, or for a thousand-dollar note he would get roughly \$985 subject to his immediate draft. This would be a direct loan. It might or might not be for a "commercial purpose." In many cases the bank making the loan would inquire whether it was intended for such an object or not, and the answer might influence it as to the granting of the loan. Under ordinary conditions the note might be spoken of as commercial paper, but there would be nothing in the nature of the case to indicate whether it was so or not. A different situation arises when the borrower at the bank has sold goods to another and draws on him at, say, ninety days' sight. The purchaser of the goods

accepts the draft by writing the word "accepted" and his signature across the face. In this case it was evident on the face of the transaction that there have been dealings between the two men which have resulted in the necessity on the part of one to make a payment to the other. This is a commercial transaction, and it may be assumed in most cases that the reason for it is that the buyer of the goods has purchased them for the purpose of reselling them. The individual who draws (seller of the goods) has, however, agreed to wait ninety days, and he desires his bank to accommodate him in the meantime. He consequently gets the bank to discount the accepted draft, and it undertakes to do so. The draft is then held by the bank during its life and is finally presented to the buyer of the goods who pays it. Meantime, the seller has had accommodation just as in the earlier case. This is true commercial paper, i. e., paper which has grown out of a commercial transaction. Such paper is often referred to as double-name paper, while paper of the kind first described is referred to as single-name paper.

There may be variations of these operations. For example, the single-name paper may be fortified by the endorsements of friends of the

maker who have placed their names to it in order to satisfy the bank that the paper was good. It is still single-name paper, however, in the technical sense of the term. So also, in the second type of transaction, the double-name paper may be further protected by documents covering the shipment of the goods which were sold, such as bills of lading, insurance policies, and the like. These do not make it any more truly commercial than it otherwise was, but merely give the bank some additional protection in collecting its money when the time comes. Again, either kind of paper may be further protected by the deposit of collateral. For example, the maker of the note in the first case, being unable to secure the endorsement of others, may have left with the bank certificates of stock or bonds which may be sold in the event that payment is not made when the note falls due. In that case the note may be a collateral note and the bank is protected by the fact that it has custody of a certificate of stock or some bonds which have a known value and can be sold in the event of default by the maker. All such variations are variations in practice merely; the two broad types of accommodation remain the same as just described.

A third type of transaction may now be briefly described. B, who buys the goods from A in the second of the preceding illustrations, may find it to his advantage to induce his own bank to accept for him. That is to say, instead of accepting the draft on himself for one thousand dollars, he may have arranged with A, the seller, that a bank shall accept the draft presented. This means that the bank agrees to pay the claim when it falls due. Of course, it will then collect from the buyer of the goods who has induced it thus to stand in his place, or, what amounts to the same thing, it has arranged with the buyer that he shall pay in the amount of the claim to it on the date when it is due, so the transaction merely amounts to the buyer's meeting the claim at his bank on the specified date. This is a bankers' acceptance. The bank in this case has substituted its name for that of the buyer of the goods. He may have left with it securities sufficient to indemnify it in case of his failure to pay, or may otherwise have protected the institution. It is clear, however, that A, the seller of the goods, will find it much easier to dispose of this bankers' acceptance than he would to discount or sell that of the buyer individually. Indeed, the

bankers' acceptance may be so good that it can be sold without any endorsement or undertaking. It is equivalent to a time draft on the bank which has accepted it so that A, the seller, may not need to go through the process of discounting with his bank, protecting or guaranteeing the amount of the loan, or otherwise obligating himself. This is commercial paper of the purest type. It grows out of a commercial transaction and it is liquid in the highest sense because it is the obligation of a bank. On the face of any such transaction it is probable that the operation is a commercial one. It may, of course, have been undertaken for some purely financial purpose, but in this case, as in others, it is possible to make sure that the transaction is commercial by specifying or identifying the goods on which the acceptance is based.

The Federal Reserve Act provides for the discount of notes, drafts, and bills of exchange growing out of commercial, industrial, or agricultural transactions, and also bankers' acceptances. It, however, limits the bankers' acceptances, which can be discounted, to those based upon the importation or exportation of goods. This limitation is imposed in order to

avoid an undue development of the acceptance business on the part of banks which perhaps would not be of the highest degree of solvency, or might have embarked upon an acceptance business to too great an extent in proportion to their resources. The Federal Reserve Act also provides that there may be bought in the open market, subject to the regulations of the Board, bills of exchange and bankers' acceptances. In framing the bill it was originally intended to include notes, so that the open-market transactions would have been upon the same basis as the discount transactions, the difference between the two being that in the latter case the paper would have been protected by the endorsement of a member bank, while in the former case such endorsement would not have been required. Before the bill finally came to passage, however, it was determined to omit notes on the ground that the purchase of single-name paper of this kind in the open market might expose the banks to some hazard, inasmuch as they would not be in as good position to judge the paper as the member banks themselves, so that they might from time to time take the paper which was not thoroughly satisfactory.

What has been said makes it plain that only a part of the paper held by banks is eligible for rediscount with Federal reserve banks, and that only a part of the paper currently sold in the open market is available for purchase by such banks. The member bank may have loaned funds to a merchant in order to enable him to extend his business. It may be well aware at the time that the loan is made that the merchant intends to enlarge his building or to construct a new building, or it may have made the loan for the purpose of enabling an individual to purchase stocks and bonds and hold them in the expectation of advance in their value; or it may have advanced funds for the purpose of enabling the borrower to invest in real estate and await an advance in the value of land. Good banking practice does not permit the making of any loans of this sort on long term. Stock loans are usually made on call—that is to say, payment may be demanded whenever the bank desires. Other loans of the kinds referred to may be made for periods of four or six months, with the understanding that they will be renewed for another four or six months. In some parts of the country there is a good deal of such paper in banks. The Federal Reserve



Act expressly permits certain classes of national banks to loan 25 per cent. of their capital and surplus upon notes running not to exceed five years in all, secured by farm lands. The purpose of this provision is to enable banks to lend to farmers who can offer land as security, but who are practically unable to offer any other security and who need funds to carry on their operations for a long period. Such loans, however desirable and sound they may be, nevertheless are not of a commercial type. They are non-liquid in the sense that they run for relatively long periods. Moreover, in those parts of the country where such loans are common it is likely to be true that the maturities of the loans cannot be distributed, i. e., that many loans will fall due at about the same time. The effort of the bank which is lending on short term in ordinary commercial business is to distribute the maturities as much as it can, so that there will be a steady stream of notes maturing throughout each month. This gives the bank a regular flow of funds back into its vaults, and it can use its own judgment about letting them out again. The other classes of loans are of an entirely different type. There is no way of distributing them well, and consequently no way of collect-

ing steadily and readily. Banks which make such loans must, therefore, count upon having to carry them until maturity. They will not find it easy to rediscount them, at least until they approach maturity. Neither will they always be able to induce the borrower to pay at maturity, because in such long loans his ability to liquidate probably depends upon the success of some enterprise in which he has been engaged in the meantime. In order to protect itself, the bank may be practically driven to renew such loans, or even to increase them. In every bank which does a commercial banking business, however, there will be found a large element of paper which is of pure commercial type. If this were not true, the bank would not be a bank in the proper sense of the term. Every bank, therefore, may be said to have two distinct classes of paper, one commercial and the other non-commercial—the former available for rediscount with Federal reserve banks, the latter practically requiring to be carried until maturity and constituting an investment of longer or shorter duration.

It has already been stated that in those cases where the borrower goes direct to his bank and secures accommodation upon his own note,

whether protected or unprotected, there is nothing in the transaction itself to show whether the purpose of the loan was commercial or not. For this reason it has sometimes been suggested that it was the intention of the Federal Reserve Act to confine the discountable and eligible paper to that which bore two names: those of the buyer and seller. Such a proposal was considered at one time, while the Act was in process of preparation, but the plan was rejected, as is shown by the language of the law which describes the eligible paper as that whose proceeds have been used or "are to be used" for the purposes specified in the Act. This, however, necessitates some investigation on the part of the bank which originally discounts the paper as to the genuineness of the commercial purpose which is alleged by the borrower at the time he gets the loan. How can the bank inform itself on this point? In small communities, or where the borrower and all of his operations are absolutely known to the bank, it may be sufficient for the borrower simply to state his purpose. The bank, after placing the funds to his credit, can tell in a general way by the character of the checks that he draws what the funds are being used for. In most cases,

however, particularly where loans are large, the bank gets its information by obtaining from the would-be borrower a statement of his condition. This statement shows the value of his business, the amount of short-term assets it holds, the quantity of goods ready for market, the long-term obligations it has outstanding, such as bonds, and the amount of bills payable, or short-term obligations which must be met within a specified period. The question whether the business is liquid or not is determined by making comparison of its short-term or immediate resources with its short-term or immediate liabilities. If there is a substantial surplus of the former over the latter it is in a liquid condition. It will be noted that this liquid character is only indirectly related to the solvency of the business. A business might conceivably be in a very liquid condition and yet insolvent, in the sense that its total assets were less than its total liabilities. On the other hand, the business may be highly solvent but very far from liquid. Its funds may have been allowed to become "tied up" in long-term operations, so that it is in want of immediate funds for actual current necessities. From the banker's standpoint the question

whether a loan to a commercial firm on the single-name paper of that firm is desired for a commercial purpose depends largely upon the degree in which the assets of the concern are liquid. If they are not very liquid it is fair to assume that the loan is practically equivalent to supplying the concern with more capital, which is to be steadily required in the business until it can put itself upon a more liquid basis.

The point at issue can be understood by considering one or two illustrations. A borrower, for example, may give absolute evidence to the bank that a sum of a thousand dollars which he is borrowing is to be used in a strictly commercial transaction, and yet this knowledge may show nothing whatever of the borrower's general policy, because it may be necessary for him to use a similar amount of his own current receipts for purposes which are practically equivalent to the investment of more funds in his business. The real test is whether the aggregate of the loans and receipts of the concern are intended to be used for, and are in fact used to anticipate, income from the claims that will mature within a short time. If such is the case, the concern is in a liquid condition, and its paper may fairly be discounted as commercial

paper. Of course this test is a somewhat general and uncertain one, and in applying it the judgment of the bank which makes the loan must be the predominating guide. In foreign countries relatively little such single-name paper exists. The course of banking in the United States has, however, been such as to develop single-name paper to an unprecedented extent, the makers dividing their obligations among a great number of banks of relatively small capitalization. This is the case with some of the great borrowers of the country. Their paper is made in notes of standard size, as five hundred dollars, one thousand, five thousand, etc., and this is then sold to any banker who has spare funds. In many cases it is practically an advance of capital for further extension of the business. In foreign countries the paper held by banks is more largely two-name, and the banker buys or discounts it with reasonable assurance that it will be self-liquidating, i. e., that the sale of goods or the consummation of the transactions for which the money has been borrowed will result in providing the means to settle the account when the time comes. Many persons who have not examined the subject closely are inclined to inquire why the

Federal Reserve Act should have limited the operations of Federal reserve banks so closely to commercial paper. In some parts of the country farmers, for example, who desire long-term loans in order to enable them to buy or pay for land, suggest that a banking system which is limited to the field covered by the Federal Reserve Act is not very useful. Elsewhere the suggestion is from time to time made that the restrictions are so great as to prevent the system from serving a general popular purpose.

Criticisms like these ignore the primary purpose for which a commercial banking system exists, and particularly the purposes for which a reserve system exists. They overlook the fact that a main function of banking is to enable persons who have debts to pay to get the funds with which to meet them, and that banking is a process of equalizing the supply of fluid funds among those who require them. The Federal reserve system is intended to provide just this means of liquefying and equalizing resources. It is not a method of supplying capital to borrowers for investment. Such investments as it makes are made for the purpose of affecting the rate of interest in the mar-

ket, and of enabling banks to meet their own maturing obligations without difficulty. While this service appears to be directly and primarily for the benefit of the commercial world, it is beneficial indirectly to every member of the community. A bank's suspension affects the whole community, and the same is true of the failure of any commercial enterprise. Important as is the function of supplying capital to those who need it for long-term investment, this is the field of finance and not of banking. Preventing suspension of payment and insuring constant convertibility of demand obligations into cash is quite as great a service to the public at large as it is to those bankers, merchants, and traders generally for whom the service is immediately performed.



## CHAPTER X

### THE NEW BANKS, THEIR MEMBERS AND THE PUBLIC

THE fundamental idea of the Federal Reserve Act was that of coöperation and union between the various banks of the country which might be members of the system. In some quarters this idea of coöperation has been referred to as "central" banking. In so far as the object aimed at is that of combination of effort and joint use of resources for the purpose of attaining a single general object, the new Act provides for a form of central banking. The plan, however, is not central in the sense of being centralized. It is a plan in which the power of control is very widely diffused, but which makes an effort to combine all the existing elements of strength so as to attain a definite object. The foregoing discussion has already made it plain what this object is. It is simply the use of liquid bank funds by all banks, for the purpose of assuring that any

given bank may, at a given time, when such assistance is desired, liquidate its own assets and thereby obtain the means for paying its creditors. It is evident that, in order to establish strong institutions able to accomplish this result in an effective way, it is necessary that the institutions should be equipped with abundant resources. It is also evident that the funds of the country which have, by banking practice, been set apart for this purpose are those which are known as "reserves," and which, prior to the passage of the Federal Reserve Act, had been held either in the vaults of the individual banks themselves or by so-called "reserve agents" in reserve and central reserve cities. One most fundamental provision of the Federal Reserve Act is, therefore, that which requires the transfer of reserves from the banks which have them now to the new Federal reserve banks. The old reserve system in the United States classified national banks in three groups: those in central reserve cities, those in reserve cities, and those in the "country." This classification was somewhat artificial, inasmuch as it was left to the volition of the banks in a given place to apply for the designation of that place as a reserve city or not, as they pleased. It

consequently happened that the banks in many cities of the United States were technically country banks, while those in many smaller places had secured the status of reserve city banks. Bearing in mind this artificial quality of the grouping, however, the classification was perfectly distinct. It was founded upon a difference in reserve requirements. Banks in central reserve cities were required to keep 25 per cent. of their outstanding demand liabilities; banks in reserve cities 25 per cent., and banks in the country 15 per cent. The reserve city banks, however, might keep one half of their 25 per cent. reserve in the form of "balances" with banks in central reserve cities, while country banks might keep three fifths of their 15 per cent. reserve with banks in reserve cities or in central reserve cities, and might distribute it among such banks as they saw fit. This classification of banks, with the accompanying permission to the reserve city and country banks to redeposit their reserves in the way just discussed, did not arise on a purely haphazard basis, but grew out of the system of providing for domestic exchange, which existed at the time of the Civil War, when the National Bank Act was passed. Under

the system of highly diffused banking which then existed it had been found necessary for banks throughout the country to keep balances with banks at certain important commercial points in order to provide remittances for merchants. The proportions in which the reserves of country and reserve-city banks were allowed to be redeposited in this way are said to have been computed as the result of an investigation of the average amount of such balances which had to be continuously kept with other banks by outlying institutions that were regularly called upon to provide exchange. The theory involved was that, inasmuch as a balance with another bank was presumably payable on demand, it was equivalent to cash in the vaults of the creditor bank, and should, therefore, be classified as "reserves."

There may have been some basis for this view so long as the accounts referred to were used merely for providing exchange. While that was the case the redeposit of reserves merely amounted to a temporary transfer and the whole basis of the banking assets of the nation consisted of fluid funds. A change in the situation was shortly introduced. Competition among central reserve city banks set in, the effort of the

different banks being to obtain as large "out-of-town" balances as they could, in order that they might get whatever benefit arose from the holding of the funds and in order that they might draw to themselves the incidental business likely to result from the maintenance of relations with country banks and others which might have funds to spare or business to transact in the cities. The great growth of stock-market operations after the Civil War increased this competition, because it shortly appeared that by developing the call-loan system it was, in ordinary times, safe for banks in central reserve cities, particularly in New York, to make large loans to stock-exchange operators, with the expectation of promptly calling these in if there should be a sudden drain upon them from their country correspondents. In other words, the country bank placed its funds with the New York (or other reserve city) bank; this New York bank built up a large "line" of demand loans to stock exchange operators; the operators traded on the strength of the cash, and when called upon by banks to liquidate, did so by selling their stocks and paying their loans, whereupon the banks found themselves in funds with which to meet the demands of their cor-

respondents. There is no difference of opinion among practical bankers and students of the theory of banking that this system was unsatisfactory. In ordinary times, when conditions were prosperous, there was no serious shock to general business as a result of it, but the effect was to produce temporary superabundance and temporary shortage of loans in the stock market, the result being that a demand for money in the interior of the country meant high rates of interest on the stock exchange, and vice versa. The worst evil in the situation lay in the fact that there was a constant tendency to inflate stock operations and to raise prices thereby, the result being that as the maintenance of the market became more and more difficult, the strain on the banks was increasingly severe and their indisposition to part with funds correspondingly marked. Moreover, in times of panic when shrinkage was imminent the banks found it impossible to get their "reserve" funds out of the stock-market securities in which they were practically invested through the call-loan operation, without producing so severe a shrinkage of values as to cause widespread bankruptcy. They were, therefore, obliged to resort to suspension of specie payments, and often did so. Furthermore, the interior in-

stitutions in times of stock-market activity frequently invested large quantities of funds which ought to have been kept by them in their own vaults, in direct loans to speculators on the exchanges, their desire being to get the advantage of the high rates of interest which were prevailing there at the time. Undue stimulation to speculative operations and undue shortage of cash throughout the country, with a highly unstable reserve system, was the result of this method of operating.

In the Federal Reserve Act it was recognized that the essential remedy was the transfer of all reserve funds from institutions which were in danger of using them in investments that might become non-liquid and to put them in the hands of institutions which would keep them in a liquid form, using them only for the objects of strictly commercial banking. The Federal Reserve Act, therefore, provided that after three years nothing should be counted as reserves by any member bank except either cash in its own vault or a deposit with the Federal reserve bank of its district. While there was no express provision prohibiting the Federal reserve bank of each district from paying interest on balances, it was the evident intent of the

Act that no such interest should be paid but that the balances with Federal reserve banks should be carried there without any inducement or stimulus to member banks. Pursuant to this thought, the Act provided that immediately upon the organization of the Federal reserve banks a specified amount of reserve should be transferred to these banks, another specified amount at the end of a year, and later instalments half yearly. At the end of three years the whole transfer would have been effected. Believing that by massing reserves in this way and making them really available for the purpose for which they were intended the total amount of money actually required to be held for the purpose of safety would be much smaller than heretofore, the Federal Reserve Act materially cut down the percentage required by law to be held by member banks, reducing it to 18 per cent. of demand deposits in central reserve cities, 15 per cent. in reserve cities, and 12 per cent. in country banks. The Act further provided that where banks held time deposits upon which thirty days' notice could be exacted by the member banks, only 15 per cent. of the outstanding liability need be kept. The following table will summarize the statements



that have been made in the foregoing pages by showing in comparative form the percentage requirements for bank reserves before and after the passage of the Federal Reserve Act:

**REQUISITES OF RESERVES—AMOUNT AND WHERE KEPT:**

**1. Banks in Central Reserve Cities (New York, Chicago, St. Louis).**

18% of demand deposits and 5% of time.

(1) In its own vaults:

(a) 6-18 thereof.

(2) In Reserve Bank for its district:

(a) 7-18 thereof.

(3) Balance, at its option in its own vaults or Reserve Bank.

**2. Banks in Reserve Cities.**

15% of demand deposits and 5% of time.

(1) In its own vaults:

(a) 6-15 for 3 years,

(b) 5-15 thereafter.

(2) In Reserve Bank:

(a) 3-15 for one year, then increasing 1-15 for each of 3 succeeding half years.

(b) 6-15 thereafter.

(3) Balances

(a) For first three years:

1. In its own vaults, or

2. In Reserve Bank, or

3. In National Banks in Reserve or Central Reserve Cities.

(b) After three years:

1. In its own vaults, or

2. In Reserve Bank, or

3. In both.

## 3. Banks not in a Reserve or Central Reserve City.

12% of demand deposits and 5% of time.

### (1) In its own vaults:

(a) 5-12 for three years, then

(b) 4-12 thereafter.

### (2) In Reserve Bank:

(a) 2-12 for one year then increasing 1-12 for each of three succeeding half years.

(b) 5-12 thereafter.

### (3) Balance:

#### (a) For first three years:

1. In its own vaults, or

2. In Reserve Bank, or

3. In National Banks in Reserve or Central Reserve Cities.

#### (b) After three years:

1. In its own vaults, or

2. In Reserve Bank, or

3. In both.

Summing this whole matter up, it will be seen that the effect of the Federal Reserve Act upon the reserves of the country, when the system has been fully worked out, will be merely that of (1) reducing the percentage of required reserve; (2) rendering this reserve really liquid by requiring that it be either cash in vault or funds with the Federal reserve bank, the latter to be either cash or investments in short-term commercial paper, and (3) eliminating the permission to count balances with other commercial banks as reserve. There has been a great

deal of misunderstanding and misapprehension regarding the operation of these provisions. It is believed in some quarters that the provisions of the Act prevent banks from keeping balances with other banks or prevent them from obtaining their usual interest on deposits with such banks, or in some way interfering with their operations. Nothing of the kind appears in the Federal Reserve Act or can be inferred from it. The Act merely repeals the older provisions of law which allow balances carried with other banks to count as reserve. There is no reason whatever why any bank which wishes to do so should not carry any balance it chooses with another bank at any rate of interest it can obtain.

Others hold that, while the requirements of the Federal Reserve Act are not open to any direct criticism for the reason just stated, it is in effect a hardship upon the member banks because it results in imposing upon them an additional reserve requirement, i. e., a requirement over and above what they have had to comply with in the past, the apparent reduction in reserves not being real, because in practice (to take care of their necessary exchange and collection operations) the member banks are obliged to go on keeping funds in New York and

other cities. There would be force in this statement if there were not, as will shortly be shown, provision in the Federal Reserve Act for carrying on the collection and exchange business of the member banks through the Federal reserve bank. Since, however, that has been fully provided for, the necessity of keeping balances with commercial banks in other cities is eliminated and there is no reason why a member bank should not, if it chooses to do so, dispense with practically all collection and exchange accounts kept elsewhere, merely retaining its account with its own Federal reserve bank and expecting that bank to perform all necessary transactions for it. Pending the time that the State banks either enter the Federal reserve system or that provision is made for collecting items drawn on them through Federal reserve banks, there may be some basis for the statement that the maintenance of certain accounts with other banks for collection purposes is necessary. This, however, will disappear, probably rapidly, as time goes on.

The effect of the Federal Reserve Act upon the profits and the prosperity of the member bank deserves careful consideration. As is well known, an important item in the cost of operat-

ing a bank is the fact that it must keep a satisfactory reserve on hand and is unable to realize anything from the amount of money thus "tied up." For example, if a bank finds from experience that it must always have on hand \$100,000 in its vaults, that means that it loses, at 5 per cent. interest, \$5,000 a year, or that \$5,000 a year is the expense to it of maintaining its reserve. The effect of the reserve requirements of the Federal Reserve Act upon this aspect of banking expense is, therefore, important. Let us take the case of the country bank under the older conditions. Such a bank may be supposed to have had outstanding \$100,000 of demand deposit accounts. Against this it had to hold 15 per cent. reserve, or \$15,000. Of this \$15,000, three fifths, or \$9,000, might be carried as a "balance" with a bank in some reserve city. The reserve city bank would usually allow 2 per cent. interest on this balance, or, in this case, \$180 per annum. Under the new system the bank has to hold a reserve of 12 per cent., or \$12,000 instead of \$15,000. This 12 per cent. is all cash, or balance with Federal reserve banks which is non-interest bearing. The bank would, therefore, lose the \$180 interest which it earned on its reserve balance under the

old system. On the other hand, there would be set free for other uses \$3,000 (the difference between \$15,000 and \$12,000). If the prevailing rate of interest in the community were 6 per cent., this \$3,000 would yield \$180, leaving the bank exactly where it was before as to income, or if the \$3,000 were used as a reserve to sustain outstanding deposit to credits or loans, it would sustain presumably one fourth as much as the \$12,000 held as a reserve against \$100,000 of deposit accounts. This would mean that deposit loans to the extent of \$25,000 could be added to those already outstanding, provided the bank could find borrowers. If it did find them its income would be 6 per cent. on \$25,000, or \$1,500, so that it would be a very large gainer by the change.

Attention may now be given to the way in which the Federal reserve system is intended to assist and relieve banks which are included among its members. The essential and primary purpose of the system is that of performing what is known as the operation of rediscount. It will be understood that by discount is meant the transaction in which a bank accepts an obligation from a customer running for a specified length of time, and advances to this customer

the amount of the obligation, minus the interest for the period for which the funds are advanced. This preliminary deduction of interest is termed discount, and the note has been discounted when it is left with the bank by one who wishes to obtain the immediate use of funds. When a bank possessed of such notes, and itself desiring funds, presents these notes to another bank in order to get an advance, the operation is called a rediscount. The notes in that case are rediscounted by the bank which presents them and they are discounted by the bank which takes them and advances funds in exchange. This process of rediscount is usually accompanied by that of endorsement. That is to say, the bank which presents the note for rediscount endorses it, thereby guaranteeing that it will be paid at maturity, or that, if not so paid, the bank obtaining the rediscount will make it good.

In Europe, generally, the process of rediscounting is a common one and banks resort to it as a customary incident in their operation. In the United States there has long been a prejudice against rediscounting, it being felt that the situation in which a bank was obliged to resort to another in this way was not one

which reflected credit upon it. It has been frequently the custom, therefore, that banks which needed funds borrowed them upon their own direct obligation or that of members of its Board of Directors, and secured such obligation by the deposit of collateral. Thus, for example, if a bank in Utica, New York, desired to borrow of a New York City bank, it might do so by simply giving its own note for the amount, or its directors might obtain loans at the New York City bank with the understanding that such loans were for the use of the Utica institution. The Federal Reserve Act is intended to make rediscounting a natural, customary, and safe method of liquidating paper and equalizing the stock of reserve money of the community among the different banks. The primary function open to the Federal reserve banks, as already stated, is that of rediscount, but they are limited in the performance of this function to their own members. They are, in other words, authorized to rediscount the paper of their member banks, thereby enabling the various members to obtain reserve credits in place of the obligations of their customers whenever they desire. It should be noted that the effect of this process is quite dif-



ferent from that of extending a "line" of credit in the way already described as being customary among the banks of the United States. Where such a general line of credit is established there is no genuine date of maturity for the loans. The bank which extends it may have taken the precaution to grant the credit with a definite maturity, and may demand payment at such maturity. This, however, does not necessarily mean that the bank thus called upon to pay has any automatic means of providing itself with resources. In the case where the bank which needs funds rediscounts a piece of commercial paper, it entirely parts with that paper, and the payment of the obligation when due falls upon the person who originally made the paper. The discounting bank has merely guaranteed that there will be no default. If the maker of the paper is practically certain to be in possession of funds at the maturity of the paper, liquidation at the time named is assured. The question, then, in carrying on a system of rediscount, is that of making certain that the paper thus presented is of a kind that will liquidate itself. Consequently, the Federal Reserve Act provides that only such paper shall be eligible for rediscount as grows out of com-

mercial, agricultural, or industrial transactions, and the regulations of the Federal Reserve Board have interpreted this to mean that the only paper eligible for rediscount is that which grows out of an actual, live transaction involving a sale of goods in commerce, industry, or agriculture. Assuming this definition to be literally lived up to, the necessary consequence is that the paper is certain to be liquidated at maturity if the maker himself is solvent. In other words, the great mass of such rediscounted paper is as liquid as the general business of the community itself. If the community has suffered some general disaster there may be a condition of suspension of payments, in which case no paper would be liquid. If this is not the case, then it may be assumed that the function of the Federal reserve bank has been merely to take from banks which had extended their credit too far, and which needed funds, a certain part of the commercial paper they had discounted and to give them the funds in exchange.

It is worth while to note how the Federal reserve bank is affected in this type of transaction. In the first place, a member bank has made loans to customers and has presumably employed all of the usual safeguards that are resorted to in

such cases to make sure that the loan is good. The Federal reserve bank has, in addition to this general investigation made by the member bank, the member bank's own endorsement or warranty that the note is good. In addition, as elsewhere seen, the Federal reserve bank has on deposit a certain amount of reserve funds belonging to the member bank, while it has, of course, the capital stock contribution made by the member bank in order to become a member. There is thus a triple additional protection against loss over and above what the ordinary or member bank has—namely, the member bank's own endorsement, the reserve, and the capital contribution of the member bank, which may be regarded as a kind of insurance margin in the event of failure, inasmuch as the reserve bank is not obliged to return to a member bank anything except the balance, whatever that may be, due it after all liabilities have been liquidated.

Precisely because the protection to the Federal reserve bank is thus so much greater than to the member bank, it is possible for the Federal reserve bank to make its rate low. All interest rates are essentially composed of three elements: the "pure" interest on money, or about what is necessary to pay in order to induce a man who

possesses capital to forego the use of it for a time, although assured that it will be returned at a specified date; the provision for expense involved in the mechanism of making loans, and the item of insurance against risk. It is probable that in most loans currently made the latter is by far greater than any other. The Federal reserve bank, therefore, by reducing it to its lowest terms, makes a corresponding cut in the rate. Since the Federal reserve banks were organized they have been able to make rates as low as 3 per cent. for ten-day paper and 4 per cent. for thirty-day paper, or, in other words, at the rate of 4 per cent. per annum where paper matured within a period not exceeding thirty days. Sixty and ninety day paper have borne higher rates of interest, and the question may be asked why there should be this discrimination if the security is practically as good in the one case as in the other. The answer is that the security cannot be called so good in the case of the longer maturities as in that of the shorter date. The real reason for making a lower rate for thirty-day paper is that the shorter the period for which notes run the less the probability that the funds obtained will be used for the purpose of financing a trans-

action which may become non-liquid. As has already been seen, the less the degree of liquidity, the less the probability that paper will be paid at maturity. The lack of ability to liquidate does not necessarily mean inability to make ultimate payment, but merely temporary postponement.

While the Federal Reserve Act was based upon the theory that the fundamental function of Federal reserve banks was to discount paper for their member banks, and thereby to enable these institutions to liquidate, the Act also made provision for what are called "open-market operations." These operations were of several kinds. The banks were permitted to deal in the securities of the United States Government to any extent they saw fit. They were also authorized to purchase and sell short-term obligations of States and municipalities running not more than six months. Bankers' acceptances might be bought in the open market, and finally provision was made for the open-market purchase of bills of exchange. It is thus seen that if Federal reserve banks were authorized to exercise all of the provisions of the Act, and chose to do so, they would have a very wide field of activity apart from member

banks. They could not only deal in long-term Government bonds and short-term warrants of municipalities and States, but they could also invest in live commercial paper of designated varieties. At first sight it may seem as if the extension of these powers was at variance with the idea that the resources of the reserve banks were intended solely for the benefit of the member banks through the liquidation of paper in which their funds might have been invested. There are two reasons why this view is not sound: in the first place, it may frequently happen that member banks are not in need of discounts, while non-member banks would gladly get funds. The member banks may, for reasons of their own, not be presenting paper to Federal reserve banks for discount, while Federal reserve banks may be largely supplied with resources. In such a case as this the open-market power gives the Federal reserve bank the ability to relieve a non-member bank directly should there be good reason for so doing, and at the same time it has the opportunity of keeping its own funds invested to some extent, thereby earning a revenue for itself at times when its resources would otherwise be idle. The second reason referred to

above is, however, more important. It is that the Federal reserve bank owes an obligation not only to its member banks as individual institutions, but also to its member banks as a group or community of institutions. This duty is that of preventing undue fluctuations in rates of interest and in maintaining, so far as possible, a reasonable, stable, and even rate. There may easily be times when such a result cannot be obtained simply through rediscount operations. In order to make a rediscount rate effective in the market, i. e., to influence the commercial rate of interest and to insure that that rate or something approximating it shall be the prevailing rate in the market, it may be necessary at times for a Federal reserve bank, or for any other institution exercising the same powers, to become an active factor in the open market and to buy and sell at the rate which it has itself established. Clearly, if this function were not thus to be exercised, the making of the rate of discount effective would be entirely dependent upon the extent to which member banks chose to obtain rediscounts from Federal reserve banks. With the power on the part of Federal reserve banks to go into the open market, the control of the

prevailing interest rate is always in the hands of the Federal reserve banks if they have a substantial amount of loan funds at their disposal. If they do not choose to employ these loan funds in open-market operations it is because they do not consider that the facts in the case warrant them in doing so.

One other point needs to be particularly observed in studying the functions of Federal reserve banks and in differentiating clearly between them. It will have been noted that when funds were advanced to a member bank such action was spoken of as a discount or re-discount, while in the open-market operation the placing of funds was spoken of as a purchase of paper. The question is often asked how a purchase of paper differs from a discount. When a discount is made it is understood that the person or institution obtaining the funds leaves them on deposit with the bank which extends the credit, i. e., uses them simply to draw upon and does not demand payment in actual money. If he needs currency he takes it in the notes of the bank which extends him the loan. Where a purchase is made it is expected to be paid for in actual money, thereby reducing the reserves of the bank which makes the pur-



chase in a corresponding degree. The effect in the latter case is to limit the lending power of the institution which advances the funds, and a purchase consequently operates to restrict the aggregate power of the bank in a much greater degree than does a discount in which the funds are left on deposit and are simply transferred by check.

The question is frequently asked whether the public obtains any benefit from the rediscount and purchase operations of Federal reserve banks, in view of the fact that it cannot discount with reserve banks, cannot keep its own resources on deposit with them, and probably only in a minority of cases can expect to deal with the reserve banks through open-market operations. The answer to this question is simply that whatever lowers the rate of interest to banks in general, in a country where banking competition exists, helps the borrower at banks in a like degree. Any five persons of good standing, who have twenty-five thousand dollars capital, can charter a national bank, and this insures tolerably keen competition between banks. The benefits of the reduced rate of rediscount to such banks are more or less speedily extended to customers of the banks. Further-

more, as already seen, the object of the Federal reserve bank is to make a reasonable and stable rate of interest, and this, if secured, is of decidedly more importance to the business and commercial interests of the United States than is the mere lowering of rates of interest.

## CHAPTER XI

### CLEARING AND COLLECTING CHECKS

ONE feature of the Federal Reserve Act which has already been briefly mentioned and described, and which constitutes a departure from former legislative measures designed to improve the currency and banking situation, was that which dealt with the clearance and collection of checks by Federal reserve banks. The Federal Reserve Act in Section 14 sets forth how every Federal reserve bank shall act as a clearing-house for its member banks, and authorizes the Federal Reserve Board, or some one Federal reserve bank which might be designated by the Board, to perform the clearing function for the Federal reserve banks themselves. This provision of the law was of fundamental importance to its proper working, and should, therefore, be briefly described from the theoretical standpoint before passing to an analysis of its practical operation.

From what has been said of the theory upon

which the Federal Reserve Act was drawn, it will be seen that the new measure sought (to enable banks to reestablish their reserves by obtaining rediscounts and corresponding deposit credits on the books of the Federal reserve banks.) These deposit credits are counted as reserves for the member banks which obtained them, although the notes of Federal reserve banks are not given that status. From this it is plain that the machinery of relief provided by the Federal Reserve Act is intended to operate more largely through the medium of deposit credits than it is through that of notes. The reason for this plan has already been sufficiently explained. Without going further into the theory underlying this view of the deposit credits, therefore, it may be stated that, since the Act is based upon that theory, it is necessary to apply it fully and broadly in order to get the result which the law contemplated. The situation may be illustrated by a concrete example. If A is presented with \$1,000 he has the use of the money, presumably, as he may see fit, and can obtain all the satisfaction which comes from the expenditure of \$1,000 in any direction that he may decide on. If, however, A is advised that the \$1,000 must be placed in

bank and kept there, he is limited in his use of it to those purchases or transfers which can be effected by means of checks. Where he is known this condition may be fully as satisfactory to him as the actual possession of currency or money to that amount; but where he is not known, and his check is consequently not accepted, he is as badly off as if the \$1,000 did not exist.

Finally, if A is informed that, although the \$1,000 has been lodged in his bank to his credit, he cannot make any use of it either by check or otherwise, he would be practically as well off if he did not have title to the \$1,000 at all. The illustration thus given is applicable in large measure to the case of a member bank so long as funds in the Federal reserve bank are not rendered widely acceptable and transferable. For example, if A is a member bank which is compelled to keep a reserve deposit of \$1,000 with its Federal reserve bank, the utility of this \$1,000 to it is very much reduced so long as the money is inactive. If the member bank is simply obliged to place \$1,000 with the Federal reserve bank and practically cannot draw, transfer it, or use it in any ordinary way, the utility of it is slight. If the member bank is

simply required to keep its balance with the Federal reserve bank at the level of \$1,000, the case is quite different. It can then establish a regular, steady flow of funds into the reserve bank, and an equally steady flow of funds out of the reserve bank. Its credit in the bank is constantly changing, but the net difference between income and outgo is never less than \$1,000, that being its reserve balance. It is this latter view of the reserve deposit that was accepted by those who framed the Federal Reserve Act, just as the former view was entertained by many who advocated the Aldrich or Monetary Commission bill, and by many critics of the Federal Reserve Act. In order to have reserve balances useful, active, and efficient, it is, however, necessary that the reserve bank should constantly stand ready to receive and collect claims upon other banks in the system. If it does not do so, it practically compels the member bank to maintain or restore its balance in the reserve institution by actually bringing coin or currency and depositing it, or by obtaining rediscounts which are credited to it on the books of the Federal reserve bank, thus keeping up its reserve balance. This would be an abnormal condition of affairs, wholly out of

harmony with the theory of modern banking.

—The original plan of the Federal Reserve Act, therefore, accepted the view that Federal reserve banks should steadily and consistently accept checks drawn upon their member banks, as well as upon non-members when such checks were presented by other members of the system, and should clear these at the minimum of cost.

—For the sake of simplicity we may illustrate this idea by supposing that a Federal reserve bank has two stockholding banks. It receives from No. 1 checks on No. 2, and from No. 2 checks on No. 1. As both banks have a deposit account with it, the claims deposited by either upon the other are quickly offset by a simple process of elementary bookkeeping. When thus offset, only the net balance needs to be liquidated, and if the claims practically cancel one another, nothing need be transferred. The whole transfer is made by book entries. The situation is the same when a great number of banks are members, except that the inter-bank claims and obligations are less likely to cancel one another. The probability that they will thus offset is still further reduced if it be true that the banks of the system constitute only a fraction of the total number of banks in the

community. Where the latter is the case it will be probable that many of the items received by member banks will not be drawn upon other member banks but upon non-members. If the Federal reserve bank does not stand ready to accept checks on non-members, but only on members, the probability of its making a clearance on its books is much less. The reader should carefully note the distinction between clearance and collection. A check is said to be collected when it is sent home to the bank on which it is drawn, and arrangement is made to remit the proceeds; it is said to be cleared when the bank receiving it offsets it against checks in favor of the institution by which it is to be paid, and then collects or remits only the balance, if any. However, notwithstanding that the presence of the large element of non-member banks outside the Federal reserve system necessarily means that clearance will not be perfect so long as these banks remain outside, it is undoubtedly true that a very large amount of transfers can be avoided if the Federal reserve banks stand ready to receive, and the member banks actually deposit with them, all checks on members. If every bank in the country were a party to the plan, checks would very



nearly offset one another, and little money would have to be shipped. In proportion as they are not members, the clearance is necessarily hampered in its operation.

The advantages of a complete system of clearance may be illustrated by the case of two cities connected by a single line of railroad. One ships wheat to the other while the second ships flour to the first. If the same cars can be used for both, then when the wheat is unloaded in the second city the shipment of flour can be placed on board and sent directly back. If, however, a different kind of car must be used, the original set of cars will make the return journey empty; while the second train will be made up for the flour shipment, and must return empty after its goods have been delivered. Thus, instead of clearing up the whole transaction in a single round trip, the second round trip has been made necessary. Where checks are collected and shipments of currency or the equivalent are made in return, the case is similar to the instance first cited. In cases where a clearance takes place, the situation is similar to that in which the same cars are used for shipments both ways.

The fact that we have never had in the United

States any general system of clearance has given rise to high exchange charges. As things stand to-day, a check drawn by one man on another in the same city is collected without charge. If he takes it to a bank and deposits it there, the bank pays the face of it, and recoups itself through a clearing-house in which the bank joins with other banks who offset their obligations against one another. The bank with which the owner of the check deposits it may have received five hundred checks aggregating, say, \$10,000; while another in the same city may have five hundred checks drawn on No. 1 but aggregating only, say, \$9,900. In such an event bank No. 2 has to pay only \$100 net in order to square itself with other banks of the community, and the cost to it is nothing beyond its share of the bookkeeping, management, and clerical service involved in the operation of the clearing-house.

When, however, collection is undertaken, there is reason to expect development of heavier charges. If the customer presents a check drawn on a bank in a different city, the bank which cashes the check is theoretically obliged to transmit that check by mail either to the bank on which it is drawn or to another bank

in the same city, and then to receive back the amount of the remittance in the form of currency, paying express or postage charges, insurance, etc., and, of course, losing interest on the funds during the time they are in transit. Of course, it is true that where exchanges are going on between two large centres such as New York and Chicago, the competition of the banks secures current rates for exchange a good deal below this estimated cost based on the elements already indicated. If experience has shown that about as much money is being sent from one community to another as is being received from that other community in the course of six months, competition among the banks brings about an adjustment wherein the claims of different individuals in the two cities are offset against one another, and only the net balance is shipped. Exchange fluctuates from time to time because the amount of the net indebtedness due from one point to the other also fluctuates. Moreover, in sundry places banks have reached an agreement with one another to fix a rate for such payments, and thenceforward such a rate is made arbitrary and is not allowed to fluctuate as net balances of indebtedness vary. Competition between banks has

led to the establishment of "par points" throughout the country—that is to say, points whose checks will be collected without charge in order to provide funds for the purpose of managing the collection of other checks drawn on other neighboring points.

Under the check-collection system which has been in vogue in the United States for many years inter-bank claims—that is, claims of one bank upon another—are the equivalent of checks when the bank which owes the money is solvent. It has, therefore, been customary under the reserve system of the United States for reserve-holding banks to say to others that they would be glad to credit these others with such checks as they (the latter) might send in to them immediately upon receipt. That is to say, it has been customary for Bank A in New York City to give immediate credit to Bank B in Birmingham, Alabama, for such checks drawn on Bank X in Chicago, Y in Tacoma, and Z in Minneapolis as B might send to A. Thus Bank A in New York City practically undertook to collect checks on X, Y, and Z; and meanwhile it stood ready to pay to Bank B the face value of these checks on demand. Of course, this meant that Bank A lost the interest on the funds

during the time that it was engaged in collecting the checks in question, and was also obliged to carry whatever expense resulted from the collection process, such as clerical hire, postage, etc. These items seem small when figured for any particular check, but when figured for the multitude of bank checks that daily pass over the counters of the banks of the country they become enormous. Moreover, it is evident that the practice of making checks immediately payable at the place where they are deposited has certain serious implications. It necessarily means that the bank which undertakes to pay them must have a sufficient sum in its vaults to meet any possible demand upon it. The same is true with other banks. This condition of affairs continues so long as there are any checks outstanding which have not reached the bank upon which they are actually drawn. There is, in short, a so-called "float" which represents the volume of checks afloat in the mails at any time and not liquidated. Under the existing system, moreover, the checks sent for credit and collection are constantly crossing one another. Bank A in New York, for example, has a check on Bank B in Chicago, and mails it to C in Chicago with instructions to collect it of B.

It may easily happen that, at the same time, B receives a check on A (in New York) and sends it to D in New York with instructions to collect it of A. If each of those checks is supposed to be for \$100, it is clear that during the period of collection Banks A and B have each become liable for the payment of \$100 which has not been charged off against the accounts of those who originally drew the checks. There is a fund here of \$200 which has to be protected by a reserve sufficient to guard against demands for cash. It is clear that this situation has grown up as a concomitant of the practice whereby deposits of outside banks in certain cities were allowed to count as reserve for them. In fact, with no central means of collection and offset this was almost inevitable.

When the Federal Reserve Act provided for transferring the reserves of member banks to Federal reserve banks, and forbade the counting of bank balances with other banks as reserves, the question inevitably presented itself to the framers of the law how to provide for the collection of checks in the best manner. An analysis of the whole situation convinced those who were engaged upon the Federal Reserve Act that if the reserves were transferred, the task of

collection should likewise be transferred—that is to say, if a Federal reserve bank was to be the holder of the reserves of its member banks, it should also be called upon to take care of their collections. A consideration which strongly supported this view was the fact that by placing the task of collection upon the Federal reserve banks it would be possible to eliminate a very large part of the expense included under the existing collection system. As has already been briefly shown, the present collection system is costly because of the funds that must be carried, and because of the high clerical expense involved in routing and transmitting checks, and in getting back the proceeds resulting from their collection. If the Federal reserve bank of a district included all of the banks of that district, each keeping a balance with the reserve bank, and if the reserve bank undertook to receive from its members all checks upon other members, the process of collection would be effected by merely charging off or crediting, as the case might be, upon the books of the Federal reserve bank, the incoming checks being distributed at the end of the day, week, or month to the member banks, just as any ordinary bank returns the checks drawn by its depositors

whenever such depositors present their bank books for balancing. Furthermore, since the Federal reserve bank under the terms of the supposition would be carrying a balance with every bank in the district, the float already referred to would largely disappear. Of course, in so far as a Federal reserve bank did not include in its membership all of the banks of the district, the system would be imperfect, although rendering very much the same service, so far as it went, as would have been rendered by an institution including absolutely all of the banks of the district. By making business arrangements with clearing-houses in those places where there are many State banks the Federal reserve banks would be able to perform much of the work that would have fallen to them under a condition where all banks of the district were included in their membership.

Shortly after the Federal Reserve Board was organized it received applications from two districts—those of Kansas City and St. Louis—for permission to undertake the general clearing of checks drawn upon their member banks. This was granted, and the two banks in question promptly undertook to receive on deposit at par, without charge for collection, any checks



originally drawn on the banks in their respective districts. The plan was highly successful from the start, and proved very acceptable to member banks of both districts. In other districts it was felt by some that there was serious legal question regarding the power of either the Federal Reserve Board or the Federal reserve banks to compel member banks to permit items drawn on them to be charged against their accounts by Federal reserve banks immediately upon date of receipt. Ultimately, therefore, a so-called "voluntary" system of collecting and clearing checks was inaugurated in practically all of the Federal reserve districts. Federal reserve banks agreed to receive from their members checks and drafts drawn on other member banks who had assented to the plan, and to credit or debit them at once as the case might be. This system took effect for the most part during June, 1915, and was subscribed to at the outset by a varying number of banks in the several districts, the total number, however, assenting to the plan being only about 1,050 out of some 6,250 banks in the Federal reserve system outside the two districts referred to.

It was seen by the Federal Reserve Board that the intra-district plan would probably not

work well unless some system were devised for the clearance and collection of checks between districts; and consequently the Board had, at an early date, taken up the question of establishing a central clearing fund in the hands of the Board itself. Plans for such a fund had been framed by a special committee of investigators named by the Organization Committee appointed under the Federal Reserve Act; and the plan which had been devised by this committee, as set forth in their report, was subsequently taken as the essential basis of the Board's plan of clearance. A committee representing the governors of reserve banks coöperated in arranging details of the plan, but no important change was introduced into the general idea. This fundamental conception was that of a deposit of gold to be made by each Federal reserve bank with the Federal Reserve Board, the actual gold being held in sub-treasuries for safekeeping, while the Board itself merely held possession of certificates representing the title to the gold. Each Federal reserve bank continued to carry its gold in the Gold Settlement Fund as a part of its reserves, representing it in this way on its books. Then from week to week the amount of the items due to other Fed-

eral reserve banks was to be telegraphed to Washington and there offset on the books of the Gold Settlement (clearing) Fund. The result would be to bring about a general cancellation of the bulk of the claims between Federal reserve banks. From one point of view there was thus created a general national clearance system, although this was limited in its scope by the extent of the clearing carried on in the several districts under the intra-district clearance plan. It will be observed that there was still lacking any system for inter-district clearance—that is to say, no plan had been devised for the depositing of checks with a member bank if they had been drawn upon member banks in other districts. The lack of such a provision prevented checks thus drawn from going through the Federal reserve bank in the district in which the recipient of such checks was situated. That is to say, there is as yet under the Federal reserve system no plan whereby a man living in New York who receives a check on a San Francisco bank can deposit this check with his own bank in the expectation that the latter will clear it through its own Federal reserve bank, except that such a transaction could be carried through by a Federal reserve bank for exchange purposes.

The ultimate success of the clearance system, both intra-district and national, must, of course, be largely dependent upon the extent to which banks come into the system. This is not merely because of the desirability of having the transactions constitute a large proportion of the total, but is due to the fact that the success and economy of the plan largely depend upon its being complete. In order to have the checks and drafts offset one another, both sides of the debtor and creditor equation must be represented. A, for example, who draws checks on his bank to the extent of \$500 per month for the payment of expenses, must receive \$500 per month from some other source in order to restore his account; otherwise his bank balance will shortly be exhausted. Taking the country as a whole, checks and drafts do thus offset one another to a large extent, and if a plan of general balancing can be developed, the result is to eliminate a large proportion of the cost of collection. As the number of banks which are members of the Federal reserve clearing system increases, the advantage and economy to those already included in the system will correspondingly increase. Many believe that this increase in numbers will progress rapidly because of the fact

that those banks which are members of the clearing system will be preferred by customers because of the fact that their checks are more readily receivable than those of others. It remains to be seen how large an influence this consideration will actually have.

What has been said, however, relates only to one side of the question of clearance at Federal reserve banks. Most of those who discuss the subject speak as if the only point at issue were that of affording cheaper collection facilities to the public. This, of course, is important, but it is only a secondary matter. The real reason why Federal reserve banks were required under the Federal Reserve Act to collect checks and drafts in the way indicated is to be found in the theory upon which the Act is based. As has been seen at an earlier point, it was the intention of the Aldrich or Monetary Commission bill to provide relief for member banks by allowing them to obtain from a reserve association legal tender notes, which could be then used as a part of their own reserves. Under those conditions the member bank which obtained the rediscount took away the proceeds of such rediscount in notes, and then used these precisely as it would have used any other form of

money. The Federal Reserve Act was based upon an entirely different conception. Under it the notes of the reserve banks were intended for use as currency but not as money. They were not vested with the legal tender quality, nor was their use in member banks reserves permitted. Of course, this meant that the only purpose which could be served by the notes was that of meeting actual demands for current circulation on the part of the public. The notes, from this standpoint, were of no use as reserves except in so far as they saved the member banks the necessity of parting with their reserves. By getting currency (Federal reserve notes) they obviated the necessity of paying out legal tender notes or gold certificates which they might otherwise have found themselves obliged to part with. The Federal Reserve Act thus discriminated clearly between the currency function and the reserve function of Federal reserve banks. The reserve function was provided for by authorizing member banks to count as reserves credits given to them on the books of Federal reserve banks. They were, in other words, enabled to get an enlargement of their actual funds not through the form of notes, but through that of actual deposits (book credits)

only. While it is axiomatic in monetary and banking theory that the notes and deposits of a bank are precisely identical in function, it is also true that in practice a note issue of \$100 has a much more inflationary influence than a bank credit of \$100, owing to the fact that it is so much more slowly redeemed. Its life is longer, and its effect in transferring and creating a demand for goods is correspondingly greater. Because of the fact that the Federal Reserve Act did not authorize member banks to use the notes of Federal reserve banks as reserves, while it did authorize them to use book balances carried by Federal reserve banks, the necessity of making such book balances quickly available and readily subject to increase is obvious. Without so doing no Federal reserve bank could perform its function as a reserve holder very satisfactorily, and member banks would consequently be deprived of a large proportion of the benefit which they would otherwise receive from rediscounting with a Federal reserve bank. The clearance and collection functions must be exercised in order to enable the reserve bank to build up its total funds as rapidly as they are dispensed, and to enable the member banks to get the advantage of readily using such funds

## CHAPTER XII

### THE NEW CURRENCY ISSUE

IT HAS been a principal cause of complaint of the existing currency situation in the United States for many years past that our medium contained no element corresponding to what is known as the "elastic" bank-note issue of other countries. There have been many kinds of currency in circulation, the principal being as follows:

(1) United States notes or greenbacks, legal tender in payment of debts.

(2) Gold certificates representing actual gold coin held as a trust fund in Washington.

(3) Silver certificates representing silver coin held as a trust fund against them in Washington.

(4) Currency certificates representing United States notes held as a trust fund in Washington or at sub-treasuries (issued only for the convenience of banks in very large denominations).

(5) Gold coin, legal tender in payment of debts.



(6) Silver dollars, legal tender in payment of debts.

(7) Silver subsidiary coin, legal tender in payment of debts up to \$5.

(8) Minor coins of limited legal tender quality; and finally:

(9) National bank notes issued by the banks and protected by Government bonds deposited with the Treasury Department.

It is easily seen that of all these classes of currency and money which have been in circulation none could be increased save by the actual bringing of metal to the mint for coinage with the exception of national bank notes. The latter could be enlarged in volume by the deposit of Government bonds with the Treasury Department, and the placing of a 5 per cent. redemption fund in the same hands. Even in the latter case, however, it is clear that the amount of national bank notes which could be issued was limited in the aggregate amount by the total volume of United States bonds in existence, and was still further limited by the fact that many such bonds were held and used to protect public deposits, while still others were held by investors, and so were not available for circulation purposes. As the national

bank currency had increased in amount until it absorbed practically all of the available volume of bonds, it has been apparent at certain times in the past that a great demand for notes could not be satisfied by the taking out of bank currency. This has already been explained at an earlier point. (In order to overcome the "inelasticity" of practically every element in the currency system various plans have been proposed.) The experience of other countries and the theory of banking both combined to indicate that there is no sound reason for differentiating between the protection accorded to notes and that accorded to deposits; but that what is sufficient in one case should be sufficient in all others, and that this (as the experience of our nation indicated) should be the best constituent of the assets of the banks—namely, sound, short-time commercial paper. The difficulty in applying this standard has been twofold:

(1) It has been contended that there was not sufficient sound paper of the kind required in the United States, and

(2) It has been urged that existing bank notes could not be displaced on account of the injustice to the banks which had bought bonds to

deposit as security for the notes, and for other reasons.

The problem, therefore, of those who wished to introduce a more satisfactory method of issuing new currency has been (that of protecting the owners of existing bonds and at the same time of furnishing an adequate basis of undoubtedly sound commercial paper deposited to protect the issue of new notes.) To attain these objects there have been many complicated plans in the past, and an additional element of complexity has been added by reason of the attempt usually made to introduce special means of insuring the safety and goodness of the notes.

When the Federal Reserve Act was in process of drafting all these considerations were taken under advisement, and it was sought both to provide for the proper treatment of existing note currency as well as for the issue of new notes. Originally the Federal Reserve Act provided for the refunding of existing bonds—that is to say, the exchange of the bonds now outstanding for new bonds to bear 3 per cent. interest, and the gradual retirement of national bank currency as this refunding proceeded. Provision was also made for the issue of bank

notes by the several reserve banks based upon the deposit of commercial paper of the kind made eligible for rediscount under the terms of the law; and the general purpose contemplated by the measure was that in the course of twenty years the existing national bank notes should be retired, and the new Federal reserve notes should take their place.

While the Act was under consideration in Congress alterations were introduced into it, and the machinery by which the purposes of the Act were to be fulfilled was altered, although it may be broadly said there was no change in the objects ultimately aimed at. Probably the most important alteration thus made in the terms of the law was that which designated the new Federal reserve notes as obligations of the United States, thus making them, in the technical sense at least, a Government currency. Another important innovation was a provision whereby Federal reserve banks might be required by the Federal Reserve Board to buy national 2 per cent. bonds held by member banks at a rate not to exceed \$25,000,000 per annum, while they were to be permitted to issue a new kind of currency to be known as Federal reserve bank notes on the strength of the bonds

which they thus acquired. It will be seen that the Act, therefore, provided for two new classes of currency:

(1) Federal reserve notes, and

(2) Federal reserve bank notes,

the former protected by commercial paper of the kind rendered eligible for rediscount under the terms of the law, the latter protected by national 2 per cent. bonds purchased from the member banks of the system, or any other Government bonds owned by the national reserve banks having circulation privileges. The ultimate form of the Federal Reserve Act, however, provided for the conversion of 2 per cent. bonds into 3 per cent. bonds by Federal reserve banks, such 3 per cent. bonds, moreover, to lose their privilege of deposit to protect circulation.

It will thus be seen that, under the terms of the Federal Reserve Act, the natural development would be conversion in a period of years of most of the national bank notes into Federal reserve bank notes with accompanying retirements of these notes, through the conversion of the 2 per cent. bonds protecting them, into 3 per cent. bonds; while, in the meantime, Federal reserve notes based on commercial paper would be issued from time to time as demanded, in

quantities sufficient to supply the elastic element in currency, and to fill up such gaps in existing national bank notes as might be caused through the retirement of note issues due to the conversion of 2 per cent. into 3 per cent. bonds not bearing the circulation privilege. (

It is now time to see how this technical proceeding works in practice, and what will be the effect of it upon the average man the country over. Let us first observe with some care exactly what gives rise to a demand for currency and to consequent issues of Federal reserve notes. When A trades with B to the extent of \$100,000 worth of goods he thereby creates a demand for some means of transferring the value of \$100,000. This exchange may be made by the actual use of money, or by the drawing of a check. Where the buyer of the goods does not have the means to pay for them he usually applies to his bank for accommodation, and such bank may meet his requirements by giving him a credit on its books technically known as a "deposit," or by issuing to him its own note or the equivalent thereof. There is no reason why the bank which is thus applied to, if it desires to grant the credit at all, should not give the accommodation in either form that may be

desired by the customer. The customer is likely to be governed entirely by the demand of the people with whom he is dealing as to the form of payment required. In the case of the bill of goods for \$100,000 already spoken of, it is probable that a check on the bank would be exactly what he wanted, in which case no question of note issue is raised. But it may also be that the funds are not wanted for a single payment of this kind, but that accommodation is sought for some purpose which necessitates a number of small payments to persons who do not or cannot employ bank checks. In this instance notes would be needed. Or it may happen that a bank discounts some paper for the purpose of getting notes with which to supply actual calls for currency made by its customers who are not necessarily borrowers but who want notes to carry in their pockets for the purpose of meeting demands from day to day. What the Federal Reserve Act does is to permit a bank to take the promises of individuals to pay at the end of a designated period, endorse these promises with its own signature, and, by the deposit of them with the Federal reserve bank, obtain in exchange Federal reserve notes issued to that bank by a Govern-

ment officer known as a Federal Reserve Agent. The fact that these notes are technically obligations of the Government confuses the situation to some extent, because it makes the transaction appear as if it were one which involved the Government in some way. As a matter of fact, it is the member bank's demand which gives the signal for the issue of the notes and determines how many of them shall come out; while it is the demand of the customer of the member bank which influences the action of that bank in applying for them. Ultimately and in broadest terms, then, the provision of the Federal Reserve Act simply allows individuals to make their own obligations, based on commercial, industrial, or agricultural transactions, and then, by putting these through a local bank, to get note currency corresponding thereto. As long as their credit is good they can get the notes, provided that the Federal reserve bank is in a position to protect these notes amply with gold. Under the terms of the Federal Reserve Act this protection must amount to at least 40 per cent. of the face of the note issue; and of this 40 per cent. 5 per cent. is deposited with the Treasury Department for current redemption, the other 35 per cent. being held in the vaults



of the Federal reserve bank which issues the notes. The currency is thus elastic, inasmuch as it can be increased to the extent of two and one half times the supply of gold available—100 per cent. being two and one half times 40 per cent—while it is safe, inasmuch as the protection is adequate to all ordinary requirements. Nothing limits the amount of notes that can be issued, therefore, except the needs of the business community and the adjustment of the country's gold supply to that of other nations.

The Federal reserve bank note differs from the Federal reserve note in that it is based upon Government bonds which are deposited with the Treasury Department to safeguard it, just as is the case with national bank notes. The Federal reserve bank, under the provisions of the Federal Reserve Act, is permitted to buy Government bonds as a form of investment if it chooses to do so. In addition to this, Federal reserve banks in the aggregate may be assigned by the Board Government bonds to an amount not to exceed \$25,000,000 per annum, and may be required to purchase them and pay for them at par. Such assignment takes place only in the event that member banks desiring to sell their bonds file application with the Treasury Depart-

ment for the disposal of these bonds and the retirement of circulation based thereon. If the aggregate of such applications should be more than \$25,000,000 per annum, the Federal Reserve Board apportions the purchases among the banks by a method prescribed in the law, which amounts to a distribution according to capital and surplus. Inasmuch as the banks which thus seek to exchange their bonds are, of course, unable to get back the notes that were issued on these bonds (the latter being in circulation throughout the country), this provision of the law amounts to permitting the member banks to transfer to the Federal reserve banks, up to the amount of \$25,000,000 a year, such Government bonds with the circulation privilege as they may have in their possession pledged to secure national bank notes, the Federal reserve banks becoming thereupon obligated for all outstanding national bank notes previously issued against them. Of course, the transaction would not occur in precisely this way, as the Federal reserve bank would pay for the bonds, and the money would go into the Treasury, there to be held against the outstanding bank notes which had been issued on the strength of these bonds. The Federal reserve bank would then be able to

issue its own notes against the bonds so taken over if it saw fit, as it doubtless would; but the result would be the same.

It is easy to see that if this process went on for about thirty years at the rate of \$25,000,000 per annum, all of the national bonds would have been taken over by the Federal reserve banks, the national bank notes based thereon retired and an equal amount of Federal reserve bank notes issued in their place. We should then have this underlying sub-structure of Federal reserve bank notes (or, in the interim, of Federal reserve bank notes and national bank notes combined); while above would be a superstructure of Federal reserve notes based on rediscounted commercial paper, and varying in amount according to the needs of the country. How great are such needs? They are, of course, only temporary and exceptional, inasmuch as the regular, steady, permanent demands are met by the underlying structure of bond-secured notes. These varying demands are in part the result of so-called "seasonal" calls, for the moving of crops and the like, and in part the result (at special times) of so-called "panic" demands. There is no positive information as to the actual amount of the seasonal demands for crop mov-

ing. They vary very greatly; and as long as there is in existence a large underlying body of notes, there will always be more or less shipment of currency from one part of the country to another to meet seasonal calls. The extent of the panic demands can be estimated on the basis of the experience obtained during the autumn of 1914. At that time calls were made on the Treasury Department under the section of the Reserve Act, which extends the operation of the so-called Aldrich-Vreeland Law through local "currency associations" for sums aggregating about \$380,000,000. This was the result of an extremely severe currency demand, and under no ordinary conditions would again be witnessed. If we estimate the ordinary normal seasonal demands at one third of this amount, it would probably be an amply high figure. It may be stated, then, that when the reserve system is in full operation there may be a call for from \$125,000,000 to \$375,000,000 of Federal reserve notes, the amount varying according to conditions. At the present time there are outstanding only about \$125,000,000 of Federal reserve notes, while of this amount all except some \$20,000,000 is protected by deposits of gold or lawful money dollar for dollar. There

can be no doubt that the quantity of legitimate commercial paper in current existence is ample to sustain even the maximum demand for currency thus indicated, so that it may truly be said that the Federal reserve system is fully able to supply an elastic currency issued to any reasonable amount that may be called for. The only limitation upon the currency is the demand of the community and the existence of actual live transactions calling for it.

Many who speak of the currency question seem to think that it is desirable for the Federal reserve banks to force out into circulation, and to keep out, as large a volume of circulating notes as possible, obtaining in exchange therefor the gold of the community. Thus it is often argued that it would be desirable to permit member banks to count Federal reserve notes as reserves in their own vaults, the effect being to make them willing to hold the notes there, and to deposit their cash means with the Federal reserve bank, which in turn would use these means as a reserve basis protecting other liabilities—notes and deposit accounts. Such a view, of course, ignores the theory upon which the Federal Reserve Act is founded—the so-called “banking theory” as opposed to the

“currency theory.” The banking theory implies that notes are put into circulation simply for the purpose of facilitating the exchange of goods, and that when this purpose has been fulfilled they should pass out of existence. Bank notes, according to this view, are not a means of displacing gold and enabling the hoarding of the latter metal, but are a means of providing a substitute for gold for the purpose of making exchanges, such substitute to continue in use so long as there is an actual demand for it for the transfer of goods, and then to go out of use as soon as this demand has been satisfied. It is often pointed out that the Federal reserve notes, not being legal tender and not being reserve money, can, at the will of the holder (if a bank) be promptly converted into reserve funds by the simple process of depositing them with the Federal reserve bank which issued them. Therefore, it is argued, the wise course would be that of making the reserve note legal tender to start with, and of permitting it to be used in bank reserves. No such conclusion can, however, fairly be drawn. [When the Federal reserve note is deposited with the Federal reserve bank which issues it, and is thereby converted into a deposit credit (reserves), the

Federal reserve bank is given a means of tracing and accounting for its liabilities at every step. The bank knows when the deposit credit is cancelled, and how effectively and under what conditions it is transferred. It has entire control of its own liabilities in this regard. The reserve deposits are not legal tender, but they are reserves for the member banks. The member banks must provide a legal tender for their own customers, but for their own use they have their credits on the books of the Federal reserve bank. This is a situation totally different in theory from that which would grow out of a plan such as that put forward in the Aldrich or Monetary Commission bill—whereby the notes of the reserve institutions were made legal tender, and available in the member bank reserves. Under those circumstances there would have been nothing whatever to produce elasticity. The note issue on its new basis will, however, be highly elastic and controllable. There can be no question of its soundness and convertibility, and none of its flexibility. It is perhaps the most conspicuous feature of the new banking system, because the one that has been most discussed, but it is far from being the most important, in view of the fact that the law, as

already stated, accepts the banking theory of note issue rather than the so-called currency theory. "No note issue without a transaction to call for it" is the first principle upon which the Federal reserve note issue is based. "No commercial transaction that cannot obtain a note issue to facilitate it" is the second principle. Taken together, they imply that the business community need not in the future fear, under any conditions reasonable to expect, a deficiency in the circulation. ) Soon after the Federal Reserve Act was adopted the Federal Reserve Board ordered and placed in stock \$250,000,000 of Federal reserve notes, and later, in order to be sure that an adequate supply was always available, \$250,000,000 more was added. As already stated, about \$125,000,000 has been placed in circulation, so that there is to-day a reserve stock of approximately \$375,000,000; or an amount adequate to meet the maximum need that has been indicated in the most severe crisis of recent years.



## CHAPTER XIII

### UNIFYING THE BANKING SYSTEM

AN IMPORTANT feature of the Federal Reserve Act is seen in the provision it makes for the unification of the banking system of the United States. The earlier drafts of the Glass bill, which afterward became the Federal Reserve Act, differed in theory, as respects this matter, from the final law. The first draft proceeded upon the view that with entrance to the national banking system perfectly free, and with the system entirely under Federal control, it was desirable to limit membership in Federal reserve banks to national institutions. Consequently, it was provided that only national banks should be permitted to become members of Federal reserve banks. The effect of this provision would have been to bring about a very compact and closely controlled system. Every bank in it would have been subject both to the supervision of the Federal authorities and to national law. As the Act finally provided, too, every

national bank would have found itself obliged to become a member of the system. Thus there would have been no difference between members in regard to their status, but every institution would have been upon precisely the same basis as every other. In these circumstances the control of the circulation privilege would have been confined to the Federal reserve system, and this, together with the great increase in strength furnished by the Federal reserve plan, would have created a uniform corps of banks which would have been the effective reserve holders of the nation.

As the work of preparing the proposed Act went further it was found that considerations of practical expediency seemed to dictate the admission of State banks to the system; and consequently the plan was changed by permitting State banks to take out stock in Federal reserve banks, and so to become members upon an equality of privilege with national banks, although not obliged to conform to the requirements regarding conduct of business laid down in the National Bank Act, except as to a few specified particulars. Chief among these, of course, was the requirement that the State banks which became members should hold re-

serves equal to those of the national banks, while they must also observe the limitation of 10 per cent. of capital and surplus beyond which loans to single individuals are not permitted to national banks. Examination by the Federal Reserve Board or subjection to its supervision was also naturally a requirement of the new provision. This plan had two apparent advantages—in the first place, it would bring all State banks under a uniform national supervision, thereby leading them (if they came into the system) to use more uniform and standardized methods; while, on the other hand, it also would have the advantage of increasing the volume of capital and surplus in the reserve system, and strengthening it against a possible depletion as a result of the necessity of providing for other banks, not members of the system, should they get into difficulty in some time of panic or disaster. It was pointed out that if, for example, all State banks in large cities could not become members of the Federal reserve system, though perhaps outnumbering the national banks of that place, there would be a serious situation in the event of panic or difficulties such as had existed heretofore. The State banks would not be members, and could not be so, were no pro-

vision made for their admission. Therefore, the national banks of each place would feel it necessary to provide for supplying the necessities of local State banks, or else would have to leave them to take care of themselves as in the past, probably through the issue of clearing-house certificates, or in some similar manner.

Those who urged this change of policy probably failed at first to recognize that, by admitting State banks, a new difficulty was made acute. This was that, since by the terms of the Federal Reserve Act, national banks were gradually to lose their circulation powers, while, in the proposed plan, State banks were to be admitted to all the advantages of the new system, inducements to banks to continue as national institutions would largely disappear as soon as they had disposed of their holdings of Government bonds, as heretofore explained. It was recognized that this difficulty was more apparent than real at the outset; but that as the national bank notes gradually disappeared, and as the entries of State banks into the system became more and more numerous, and their competition more and more severe, the tendency would be to make institutions hesitate a good deal before deciding to operate under na-

tional charters. They would naturally say to themselves that if they could obtain all of the benefits of the Federal reserve plan of coöperation, with probably the privilege of withdrawal at their own pleasure, while including no greater liability and sacrifice than they would as national banks, they might as well recharter as State institutions and so obtain for themselves all of the advantages of the new system with a minimum of expense and obligation. The plan was, therefore, widened once more by providing that the Federal Reserve Board be permitted to grant, upon application, to national banks desiring such privilege, the right to exercise the functions of trustee, executor, administrator, and registrar of stocks and bonds. These so-called "trust-company powers" were regarded as profitable, and consequently likely to make up in some measure to national banks for the intenser competition that might come to them from such State banks as might join the Federal reserve system. A still further step was taken by providing that national banks might engage in the savings deposit business. In the House draft of the Federal Reserve Act this savings plan took shape in a lengthy section which provided for the establishment of distinct sav-

ings bank departments. In the Senate, however, this provision was eliminated, and in lieu of it was substituted the authority to national banks to receive savings deposits, subject to only 5 per cent. reserves, such deposits being defined as those that were payable only upon a notice of thirty days. As the Federal Reserve Act had from the beginning contained a provision authorizing a certain proportion of loans on farm land security to be made by national banks not situated in central reserve cities, a long step has evidently been taken in the direction of transforming national banks into active competitors of State banks and trust companies in sundry lines of business which have always ranked as among the most profitable carried on by these institutions.

The theory of the Act as thus altered is plain. It was based upon the idea that unification was desirable; but such unification was now to be obtained by rendering the functions of national banks similar in a very high degree to those of State banks and trust companies. Federal reserve banks were, on this theory, rendered more than ever necessary, because the savings bank, real estate, and trust company provisions of the Federal Reserve Act would inevitably tend to

reduce in some degree the liquid character of the national banks, thus rendering a substitute desirable or necessary, and this substitute would, in the natural course of events, be supplied by the Federal reserve system.

Almost immediately after the adoption of the Federal Reserve Act there was a demand from national banks for the establishment of regulations under which they could gain the advantage of the 5 per cent. reserve requirement, and these regulations were speedily issued. The result was, in many cases, to reduce the amount of reserves carried by the banks against savings accounts, which had been previously protected by a large, perhaps unnecessarily large, reserve. There was, however, a tendency on the part of some banks to convert a portion of their deposits into accounts classified technically as savings accounts, thereby enabling a change in the reserves to take place. Of course, in so far as this movement resulted in reducing reserves carried against deposits which were actually commercial, and, therefore, should have been protected by the usual reserves, it was undesirable; and the Federal Reserve Board has consequently done what it could to check any such process. Among other measures it revised and

strengthened its original circular in which savings deposits had been defined.

In the same way an urgent demand for the granting of trust company powers was heard, but the Federal Reserve Board did not deem it wise to take action on this subject for some months after its organization. It was felt that time should be allowed for a full and careful investigation of the legal aspects of the question particularly in view of the fact that it had been expressly provided in the Federal Reserve Act that the powers in question should be granted only in so far as they did not contravene State or local law. An investigation showed that some States had on their statute books laws which plainly prohibited the exercise of these functions by any institutions other than those specially chartered for the purpose; and it was clear that in these States it would be necessary to revise the statutes in question if national banks were to be authorized to proceed. On the other hand, there were a number of States in which the statutes equally clearly permitted the exercise of the functions in question by national banks. Intermediate between the two classes of States was another group consisting of those whose statutes were, at least, of doubtful mean-



ing, being capable of an interpretation favorable to the exercise of the functions in question, or adverse thereto. The winter of 1914-1915 and the following spring was largely occupied in a number of States with a discussion of this situation and with efforts to legislate one way or the other. The result was that several States passed acts permitting the exercise of the functions of trustee, executor, etc., by national banks, while several passed statutes practically forbidding it. Moreover, a number of States passed acts enabling these institutions to become members of the Federal reserve system, feeling that the two things went together—that is, if a State permitted national banks to exercise trust company powers it should also permit State banks to become members of the Federal reserve system. In some States the opposition of trust companies became so vigorous as to prevent any action or to bring about the hostile action already referred to. The trust companies, however, were not satisfied with this result of their activities, and they consequently retained counsel for the purpose of filing a suit designed to test the constitutionality of the trustee and executor provision of the Act. This apparently makes a lengthy legal contest necessary

before the exact status of the clause in question will be made certain. Meanwhile, the Federal Reserve Board has taken the position that all it can grant, under the terms of the law, is power to exercise the trust company functions when not in contravention of State or local law, and that the determination of the legality of the functions must, therefore, be left to the individual banks themselves, in order that they may satisfy their own minds as to State law on what they propose to do before proceeding to engage in a new class of business, or else take the consequences in the form of subsequent legal difficulties.

The question of admitting State banks to the Federal reserve system was, as already indicated, very closely allied to the question of granting the trust company powers previously referred to, but the Board did not act upon it until June 7, 1915, when it issued a circular permitting State banks to enter the Federal reserve at once. During the months after the passage of the Federal Reserve Act, and before the Federal Reserve Board was created, while the Reserve Bank Organization Committee was conducting its investigations, a few State banks had been admitted to membership. After the Federal

Reserve Board was organized it was found that some State banks were exceedingly desirous of becoming members, and they were finally permitted to do so upon condition that they would conduct their business affairs precisely as if they were national banking associations; that is to say, would abide by the loan requirements of the law, and, of course, by the specific requirements imposed upon State bank members in the Federal Reserve Act. In accepting such membership, the State banks were also, of course, obliged to take their chances regarding the position ultimately to be assumed by the Board with reference to the right of withdrawing from the system. These conditions were onerous, and consequently only a few State banks accepted membership, although there was a considerable waiting list, including banks which desired to join, but preferred to await the ultimate action of the Reserve Board in issuing its regulations before they committed themselves to the final step.

The question which gave the Federal Reserve Board the most concern was undoubtedly that of the power of State banks to withdraw from the system. Very early in the consideration of the whole subject, a committee was ap-

pointed by the American Bankers' Association with instructions to visit Washington and express the views of the State banks as a body (including trust companies) to the Federal Reserve Board. This committee came to Washington, but in giving its testimony failed to state with any degree of definiteness or accuracy exactly what State banks desired, or on what terms they would consider it feasible for them to be admitted to the system. The committee, however, was explicit in its belief that if the State banks were expected to come in at all they must be permitted to go out at will; otherwise, it was asserted, they would not be willing to become actual members. Division of opinion promptly manifested itself among lawyers with regard to such withdrawal, and some contended that, under the Act, State banks had no right to retire; while others held that the plain and unavoidable implication of the law was such as to make the withdrawal an obvious and proper exercise of power on the part of member banks. The consensus of opinion, however, seemed to be preponderatingly on the side of those who held that the State banks could legally and properly be permitted to withdraw from membership, and such provision

was consequently embodied by the Federal Reserve Board in a circular issued June 7, 1915. The Board asked of State banks only that each, before entering the system, should be carefully examined, and should be found to be a desirable member, possessing sound liquid assets and conforming, in the amount of its capital as compared with the population of the place in which it was located, to the provision of law regarding national banks; that such State banks should agree to adhere substantially to the same lines of business they were pursuing when admitted to the system, even if their charters might give them additional powers; and in general should continue to operate a straightforward business along the lines which had been indicated at the time of their admission.

The Act provides that every State bank shall comply with the requirements that are imposed upon national banks with regard to capitalization in relation to population, and in regard to the amount of reserves maintained. Such State banks must, however, conduct themselves in a general way on the basis of banking management that is laid down for national institutions under the Federal Reserve Act and in the new regulations, although it may be said

in passing that there is nothing in either to interfere with the regular banking operations of those banks which are organized under State law, or to prevent them from taking advantage of those broader provisions of legislation which are found on the statute books of some States. But, in a general way, State banks which enter the Federal reserve system must live up to certain requirements as to capital and reserves, and must submit to examination on the same basis as the national members of the system. How will this affect the State banks?

It is undoubtedly true that in some States local standards are lower than those of the Federal reserve system. We cannot, however, get a fair test of the case by merely noting that there is a difference between State and national legislation in this regard. The real question is not whether there is a difference—that is to say, whether a State bank can, if it chooses, get down to a lower basis of management than that prescribed by the national law—but whether the basis prescribed by national law is unduly high or severe.

What has just been said may be considered as bearing primarily upon the case of a State bank which is just organizing, has not become

involved in any business transactions or complications, and is considering for the first time the question whether it shall affiliate itself with the Federal reserve system or not. But, as a practical matter of fact, such banks are few in number. The question must be discussed from the standpoint of the State banks which have been in existence for years past, and which are active, going concerns, their funds involved in various transactions, and their credit committed to the support of various enterprises. It is probable that the two principal obstacles to the entry of State institutions into the Federal reserve system will be as follows:

(1) The existence of too large an element of real-estate loans in the portfolios of the institutions.

(2) The existence of what are called "excessive loans," by which is meant loans to single persons or individuals, greater than the amount permitted under the National Banking Law.

It has been rightly assumed by State institutions that they ought to eliminate these two grounds of criticism if they expect to enter the system. A good many have in the past suggested that they be given a reasonable amount of time to comply with the requirements, it

being recommended that such time should include a period ranging from six months to three years. It is probable that a good many institutions could, if they chose, get ready to enter in much less than a year, while there are others that could not successfully prepare themselves without a much longer period than that. The regulations for the admission of State banks, however, do not provide for any probationary period.

The Federal reserve system is essentially intended as a commercial banking system. It is, therefore, not particularly desirable that any bank should enter the system unless it is doing or intends to do a commercial business. All those institutions which are engaged in operations that render it unnecessary or undesirable for them to comply with the commercial requirements are, ipso facto, outside the range of banks that will be much benefited by membership. Although, technically speaking, every State banking institution willing to comply with the law may become a member of the Federal reserve system, it is not to be expected that those should do so whose business is essentially of a different type from that of the commercial banks of the country, and which are, conse-



quently, either forced to make a sacrifice, thereby subjecting their customers to discomfort or inconvenience, in order to come in, or which are in some other way subjected to difficulty as a result of it. In a word, no State institution will in the natural course enter the Federal reserve system unless its business is of a distinctly commercial type. Granted that, there is every reason why it should come in, but granting that its business is of a different type, the case changes.

It seems to have been supposed by some banks that they must enter the Federal reserve system in order to get the benefit of it. That is only partially true. If the Federal reserve system attains the objects for which it is intended, it will do so because of the fact that it modifies the whole banking situation. It will provide a market for commercial paper and will tend to bring discount rates to a degree of uniformity that has never before been possible. When the conditions are such throughout the country that commercial paper of known value can be marketed, and when, through the development of the principle of combined reserves, panic dangers are largely eliminated, every institution, whether a member of the reserve system or not,

will get the benefit of the improved situation. Of course, this result cannot be reached unless a sufficient number of commercial banks are joined together in the system. Enough are already members practically to insure this state of things, but the assurance will become more and more distinct as more and more of the commercial banks join. Should they all enter, the system will gain no additional strength by the incorporation of members whose business is of a primarily investment character, even though they technically comply with the reserve requirements. Neither will the institutions themselves profit particularly by such membership. They will get the advantages of the system in any case by being enabled to borrow under more favorable conditions from the member banks which have rendered their own assets more liquid through their own membership in the system, and have thereby enabled themselves readily and regularly to afford such aid as may be asked for by their banking customers.

It is probable that State bankers, who have what to them seems a good reason for postponement of action, will continue to find such reasons for some time to come, and will not bestir themselves to become members until a very dis-

tinct, fresh motive is afforded to them for so doing. If the rediscount plan operates as it is expected to, State banks will get the benefit of it indirectly by finding themselves able to dispose of their paper on favorable terms in the open market without necessarily going to a Federal reserve bank for their accommodation. It is rather to be expected that the motive tending to lead State bankers to enter the system will be found in the clearing function. If the clearance provision in the Federal Reserve Act be successfully developed, it may be expected that business will be transferred to the member banks by those who will appreciate the immense advantage open to them as a result of the provisions freeing them from the oppressive conditions to which they have been subjected in regard to domestic exchange. It will be imperative for State banks to place themselves upon as good a foundation for appealing to the public in this regard as that upon which the member banks rest. We may say, therefore, that the early entry of State banks into the system depends in a very large measure on the way in which the clearance feature is handled and the extent to which the clearing function is taken over by the Federal reserve banks.

Not a few ask: Will the Federal reserve system tend to enlarge the national system of banking or to limit it? In other words, will the future of State institutions under the Federal Reserve Act be a future of gradual conversion into national banks, or will the State institutions find their ranks gradually enlarging until ultimately the banking system of the United States consists of a body of banks organized under State law and federated together in twelve Federal reserve institutions, the national banks being either extinct or on the road to extinction? In much of the banking discussion of the past two or three years it has been stated that the drift of things was toward the elimination of the national bank. This was on the ground that, with the bond basis for currency issue definitely removed, there would be no particular reason why a national bank should exist, while with the privilege of membership in the Federal reserve system open to State banks, it would be largely a matter of indifference under which system an institution might organize. At times it has seemed that those who thus argued had a rather substantial basis for their predictions. And yet, since the adoption of the Federal Reserve Act, the national system has grown rap-

idly. During that time there have been organized (to July 1st) about 284 institutions. And this rate of growth is essentially the same as in recent years. There seems to be little disposition on the part of already established banks to leave the system, but, on the contrary, the process of new organization continues as above noted. It may be inquired whether this is not due to the fact that long experience has not been had with the new system, so that men naturally tend to follow in the groove marked out by custom, even though there are factors working against that course. Were this question to be answered in the affirmative we should have to conclude that the probable relation between national and State banks under the Federal reserve system, and the relative growth of the two groups, would be a matter for future determination as to which no positive opinion could be expressed to-day. To some extent this is undoubtedly the situation. Some States have already been making vigorous efforts to hold their own banks under State law. An example is seen in the case of the State of New York which has recently liberalized its Banking Act, shaping a piece of legislation which some believe is more favorable to satisfactory banking

than the National Act as modified by the Federal Reserve Act. This action, however, has been taken in order to prevent State banks from converting to national. The problem before us just now is the converse of that, and is whether there will be a drift of national institutions into the State system. It would seem that there is good ground for believing that as a result of banking discussion and largely in consequence of the unifying influence of the Federal reserve system, there will be a much stronger drift than heretofore toward standardization of bank examinations and of banking legislation. The Federal Reserve Act will have a very powerful influence in bringing about uniformity of conditions in examining banks and in controlling them generally. If such uniformity be rightly developed, it may be supposed that banks already holding either a State or a national charter will continue as they are now.

## CHAPTER XIV

### FINANCING FOREIGN TRADE

ONE of the innovations provided by the Federal Reserve Act is found in the section relating to foreign branches. It has been a subject of complaint for a long time that the foreign trade of the United States was inadequately financed. National banks not being permitted under existing law to establish branches abroad, it has been felt that in many cases Americans doing a foreign business could not get the accommodation to which they were entitled. It has been asserted that in those countries where the foreign trade of the United States was still limited in amount and undergoing development subject to more or less severe competition, the problem of securing adequate funds for the trade was particularly difficult. There have been several considerations which seemed opposed to these views. For example, under the laws of various States it would have been possible to organize banks authorized to estab-

lish branches abroad had that been desirable. Moreover, private banking houses in the United States have not only been able to, but have, in fact, established such foreign branches. On the other hand, it has never been clearly shown that foreign banking houses would not give American traders the accommodation they needed in the countries with which they were endeavoring to build up business. It has apparently been true that an American firm doing business in (say) Brazil could get accommodation from the branches of English banking firms there established on very much the same terms that would be granted to English concerns, provided that the same security was offered, and that the same business requirements were observed. Nevertheless, the demand for a modification of the banking laws of the United States which would permit the organization of foreign branch banks has continued, and has at least had the merit of being based upon negatively sound considerations. That is to say, since banking theory supports the view that branch banking, particularly in foreign trade, is a desirable, not to say necessary, method of conveniently carrying on banking operations, there has always been a strong *prima facie* case in favor of permitting



the establishment of such branches, no matter whether or not their organization was likely to be immediately undertaken.

This state of affairs was fully recognized throughout the later years of the discussion of banking legislation. In the National Monetary Commission's investigation and report much attention was given to international relationships, and the report dwelt extensively upon the need of a better method of financing the exports of the United States and the foreign trade of the nation in general. In the bill proposed by the National Monetary Commission (the "Aldrich bill"), provisions were embodied under which a certain number of national banks might combine to establish a bank whose function was to be solely that of financing foreign trade, and which was to be authorized to establish branches in foreign countries as desired. The thought underlying this provision was that, by permitting banks to join in establishing other banks for the creation of branches, small banks would be enabled to get the advantages of the provision by uniting their efforts with those of others. If, however, the permission to create branches must be availed of by a single banking institution, it

would be requisite to insist that this banking institution possess a very substantial capital, which would necessarily mean that only a relatively small number of large banks would be likely to go into foreign fields and establish branch banks of their own. This latter view was undoubtedly sound in so far as related to the establishment of a network of branch banks abroad; but it is clear enough that there are many banks in the United States whose capital is ample to enable them to establish a few branches abroad if their business interest is such as to require it.

When the Federal Reserve Act was under consideration it was at first thought that the plan of joint associations of banks for the establishment of branches would be the more desirable provision, but subsequently this view was abandoned, and in the final Act a provision was made for permitting any national bank having a capital and surplus of not less than \$1,000,000 to establish foreign branches. It was left to the Federal Reserve Board to determine by regulation about how much capital should be allotted to such branches, and what should be the conditions surrounding their establishment. This provision was ultimately

adopted with little change, and now constitutes Section 27 of the Federal Reserve Act. The organization of the Federal Reserve Board made it possible for national banks to make application for the privilege of establishing branches, and to undertake this work actively, but prior to July 1, 1915, only two national banks had applied for and received permission to establish such branches. Of these two, but one undertook the task upon a large scale with an evident view to doing a broad commercial business.

The Federal Reserve Act, however, approached the question of financing foreign trade not only from the standpoint of the machinery involved, but also from that of practical business methods. It is well known that foreign business generally is transacted upon the basis of standard paper known as "acceptances." The National Bank Act, however, never legalized the use of acceptances, and they have, therefore, been regarded as a prohibited type of paper. The result is that they have not figured to any great extent in American banking practice. There was nothing to prevent State banking laws from providing for the use of acceptances, but such laws have

usually been modeled upon the National Bank Act, and have, therefore, been accustomed either to ignore the acceptance question or to prohibit this form of paper. Consideration has already been given to the acceptance when discussing commercial paper, but at this point it is necessary to examine the special relationship of this form of loan to foreign trade. The Federal Reserve Act provides that any national bank may accept paper growing out of actual commercial transactions involving the importation or exportation of goods, and having not more than six months to run; while it also authorizes Federal reserve banks to rediscount such acceptances when endorsed by member banks, or to buy them in open market whether with or without the endorsement of member banks. Emphasis should be placed upon the fact that this type of paper is limited only to actual operations involving foreign shipments of goods.

How this provision bears specially upon financing our foreign trade, and what are its important indirect effects upon banking and commercial operations generally, may be understood from a brief review of foreign trade methods. In trade between foreign countries

the method of procedure is somewhat as follows: A merchant, A, in Buenos Ayres, ships coffee to B in Liverpool. It is agreed that B will accept the draft accompanying the coffee at ninety days' sight. It may be, however, that A, when shipping the coffee, desires to arrange for a credit that would enable him to liquidate very promptly. He may, therefore, have agreed with B that his draft for the coffee shall be accepted by a Liverpool bank. This bank is induced by B to agree to accept the draft when it is presented. B may protect the bank in some special manner if the institution demands such action, or he may simply have made a satisfactory statement and showing to the bank so that that institution is willing to accept the draft in consideration of a moderate commission or discount paid it by B for the service. When it has thus accepted the draft—that is, agreed to pay it at maturity,—the paper becomes the obligation of a bank of known standing, and is, therefore, very readily salable to some other bank. The discount on it will consequently be very low, and the original drawer of the draft will be able to get his money immediately with very little sacrifice. This means that he can sell very much more closely than

would otherwise be possible, because he knows that he will lose very little money in the form of discount or interest.

With this type of transaction may be contrasted the earlier methods of financing foreign trade in the United States. Suppose that A, in London, has sold woolen goods to B in New York. B may agree to accept the draft of A and may do so; but under a previously existing law he has been unable to get a bank to accept for him. This meant that a different method of financing was usually provided for. A would borrow from his own bank, giving his own note for the period for which he wished to have accommodation. Then, when the draft was presented, he would pay it off with the funds placed to his credit in his bank, or, if, say, a ninety-day credit had been extended to him, he would wait until maturity and then satisfy the claims of his creditors out of the funds that he happened to have in hand, or, if necessary, from the proceeds of the loan obtained from his bank. Both of these methods were expensive. In case he borrowed the money from his bank with which to meet the draft, he had to pay such rates of interest as the bank might exact. Probably very little competition would be felt—

certainly that would be the case in many instances. If he simply waited until the maturity of the draft before making payment, he was, of course, obliged to pay a higher price for his goods in order to enable the seller to realize sufficiently to carry the loan himself. In other words, the lack of the bankers' acceptance has rendered the financing of foreign trade a good deal more costly for American exporters and for the banks on which they depend than is true of the exporters of any other country. It was this situation that the provision of the Federal Reserve Act was designed to correct; and, of course, it was only logical that the paper thus legalized for national banks should likewise be rendered eligible for rediscount at Federal reserve banks. The fact that it had been made eligible in that way naturally gave it a much higher degree of liquidity than would otherwise have been characteristic.

The bankers' acceptance provision of the Act had, however, as already intimated, a much larger significance than that which is involved in the cost of the trade itself. In order to understand why this is true, a brief reference to the theory of international trade and international banking is necessary. In former

years economic writers took the view that the "balance of trade," or difference between the amount of goods exported and the amount of goods imported by a country, was necessarily liquidated in money, and that the effect of such shipment of money was to render prices higher or lower, as the case might be, in the country from which the money was shipped, or by which it was received, the belief being that prices varied directly as the quantity of money, being high when that was large, and low when it was small. It is now recognized that such shipments do not necessarily occur, but that a country which has shipped more goods than it has received, and so has a balance coming due to it, might see fit to invest this balance in the country which owes it, receiving in exchange securities or evidences of indebtedness. On the other hand, it has been evident that there are heavy or periodic movements of goods between countries, or different cities of one country, so that while there might be a heavy balance against (say) the United States during the late spring and early summer months, this would be liquidated during the late summer and early autumn, when staple products such as wheat, cotton, and the like are shipped. During the



intervening period, when a heavy balance was owing, the banks would be preparing themselves to meet the obligations, and instead of shipping cash would be carrying the funds in the form of investments in paper. Then, too, when the banks of any country have a surplus of actual cash funds as a result of heavy shipments to them from other countries they are under the necessity of employing them pending the time when they will be called for by their owners. In the United States a surplus which is carried in this way is likely to be invested in the form of call loans secured by stock or bonds, while in foreign countries it is likely to be invested in bankers' acceptances. We may sum up the situation by stating that in modern trade there is never a time when trade between different countries is exactly stable. Balances are due from one to another, and they are represented by the acceptances or obligations of banking houses, due at specified dates, which these houses stand ready to liquidate. The acceptance market abroad is, in a sense, the balance-wheel of foreign trade, because it represents the factor which is making for stability, and which tends to keep business in a stable, normal condition as between different countries. So

long as surplus funds are invested in loans on stock, so long must a country necessarily be without the resources it stands in need of to meet any sudden demand or claim upon it for funds to liquidate international balances. So long as the surplus is invested in the acceptances of bankers, just so long is it in position to meet obligations to foreign countries by offering claims upon bankers in those countries, or upon bankers in other countries with which such creditors are engaged in trade. This is an easy and natural way of liquidating and equalizing international balances. For this the Federal Reserve Act makes provision in the way already described.

The desirability of putting this provision into actual operation, so far as Federal reserve banks are concerned, was early seen by the Federal Reserve Board, which issued a regulation on the subject, subsequently revised and improved as a result of experience. The regulation provided that Federal reserve banks might buy in the open market any acceptance they saw fit, either with or without the endorsement of a member bank. This provision was intended to give as large a field or scope as possible to the development of the acceptance, and

to facilitate the growth of the new business as much as possible. A peculiar situation was caused with reference to the acceptance almost from the very moment when the Federal Reserve Board was organized. As already noted, the Board had been established at practically the same time the European war was declared. Up to that time nothing of importance had been done in acceptances in the United States, although some States, notably New York, imitating or enlarging upon the provisions of the Federal Reserve Act, had already permitted dealing in acceptances on the part of banks organized under their laws. It was further evident that the acceptance being by the terms of the Federal Reserve Act confined to foreign trade operations, it would not be likely to develop very largely inland, but would confine itself to the seaboard cities. In these circumstances the acceptance business was undertaken much more promptly than the expectations previously entertained would ordinarily have justified. Acceptances were made during the first few months after the organization of the Federal Reserve Board by a number of large banks, chiefly, however, by those situated in the Eastern seaboard cities; while the most

rapid development in the business was secured by those institutions which already had large connections abroad, and were able to develop the trade with the assistance of their banking correspondents in other countries. It was apparent, before the business had been in operation long, that the Federal reserve banks would have obtained little acceptance business had they been confined to that paper which carried the endorsement of a member bank. Inasmuch as the Board's regulation permitted them to go into the open market and to buy the acceptances of any bank they saw fit, they quickly built up a considerable business in paper of this kind. The following table shows what had been done under the acceptance provision of the Federal Reserve Act by the Federal reserve banks themselves up to the end of June 1915:

Date	Member banks' acceptances	Non-member banks acceptances		Private banks	Total
		Trust companies	State banks		
1915					
May 31	\$5,294,000	\$3,774,000	\$10,000	\$110,000	\$9,188,000
June 7	5,242,000	4,516,000	10,000	192,000	9,960,000
June 14	4,690,000	5,080,000	10,000	131,000	9,911,000
June 21	5,047,000	4,828,000	.....	146,000	10,021,000

Acceptances indorsed by member banks: Member banks' acceptances, \$1,686,000; trust companies' acceptances, \$120,000; private banks' acceptances, \$20,000; total, \$1,826,000.

In current discussions of foreign trade and of the use of the acceptance, it is often assumed that foreign trade can be financed simply as a result of current sales and purchases. From this it naturally follows that if appropriate banking machinery be available to carry the trade, there would be little difficulty in securing a satisfactory development of the business. This assumption, however, is not in accord with the facts of modern international commerce. International trade is not carried on upon a money basis, but in many countries payment for large quantities of staple purchases is made in the form of securities based on the enterprises in which the goods thus bought are employed. For example, shipments of steel rails to China for the construction of the railways of that country have been paid for in bonds which have been taken by banking concerns in the country which sold the rails, and then have been transferred to the investors who, in the last analysis, supply the money. Similar methods of financing have been adopted in dealing with Brazil, and with other South American countries where trade grew up on a basis of borrowed capital. While trade between older nations, as, for example, France and Ger-

many, is not necessarily founded upon international loans of this kind, they nevertheless figure to a considerable extent. Capitalists in one country are constantly looking for openings in another, and a general interchange of securities has resulted. From this it follows that, as a rule, the country which exports to another is obliged to provide capital for the development of business in that other. In South America, for example, there will be little development of American trade unless the United States is willing to supply the capital for the financing of enterprises on a long time basis. Even in those classes of operations which are not founded on bonds, it is frequently necessary that banks should stand ready to finance the trade by carrying the merchants who are conducting it during a crop period, instead of expecting to be paid immediately upon arrival of the goods. In other words, foreign operations are not exclusively of a banking nature, but are also financial in the larger sense of the term. Another aspect of the same situation which deserves notice is seen in the fact that whenever one nation is in the habit of transacting most of its business with another, and particularly when it is in the habit of ob-

taining its capital from that other, the currency of the creditor nation becomes the standard of exchange on the part of the debtor. In those circumstances bills drawn in payment of goods sold by a third country are usually stated in terms of the currency of the nation which occupies the position of creditor. That is to say, a Brazilian debtor who wished to pay for goods he had bought in New York is likely to remit a draft drawn on London in pounds sterling. The business of financing the trade between the United States and Brazil is in that way thrown to London, and the banker in London gets his profit from the operation even though it does not concern English goods directly.

The plain conclusion to be drawn from the state of things just described is that although the Federal Reserve Act has provided the mechanism for conducting foreign trade by permitting the organization of branches of national banks, and although it has furnished a means for bringing the banking paper of the United States into harmony with that of other countries through the introduction of the acceptance, there is no reason why international banking should be developed by Americans very much

more largely than at present, pending the time when the United States is ready to furnish the capital that is needed by business men and producers in the countries with which trade is being built up. It should be borne in mind that the growth of the acceptance business in the United States during the past few months since the Federal reserve system was inaugurated has been in a measure artificial. The real test of the power or disposition of American bankers and business men to develop the bankers' acceptance on a permanent basis will be found when the European war is terminated and a normal condition of affairs has been restored in international relations. The prospect will then, however, be better than it would have been had not war occurred, for the reason that there will be a much larger demand for American capital and American banking machinery than would have been the case under ordinary conditions.

Having thus dealt with the general question of foreign trade and the way in which the Federal Reserve Act provides the necessary mechanism for its conduct, a few words should be said with reference to the foreign operations of the Federal reserve banks themselves. The Act grants per-



mission to Federal reserve banks to establish agencies abroad wheresoever they may deem best. Thus far none such has been established, and it is not likely that many will be until after the termination of the European war. Ultimately it will fall to these banks to handle the foreign exchange transactions, and to make payments and collections in foreign countries, while it will be the part of wisdom for the banks to keep a substantial amount of their funds constantly invested in foreign bills in order that they may exact their full influence in controlling the movements of money and rates of exchange between the United States and other countries.

## CHAPTER XV

### THE GOVERNMENT AND THE RESERVE SYSTEM

FOR many years past the essential relations between the Government and the banks have been a matter of public discussion and controversy. During the early days immediately after the founding of the United States the view that close relations should be maintained between the Government and a great central bank which should hold the public funds, receive, and disburse them, was the accepted theory. It was on this basis that the First Bank of the United States was founded. There was always opposition to and doubt concerning the validity of this theory, and after the twenty-year charter granted by the Government of the United States had expired the Government went back to the plan of placing its funds with the many small banks of the states. This proved unsatisfactory, and the breakdown of the system was in large part responsible for the restoration

of the old method, the Second Bank of the United States being chartered largely for the purpose of handling the Government's finances. When this institution had been disestablished in 1836, owing to the political controversies which raged around its management, the old unsatisfactory plan of depositing with State banks was resumed and was found to be as faulty as ever. Heavy losses to the Government and great inflation ensued, and ultimately the so-called Independent Treasury System was brought into existence. The theory of the Independent Treasury System has been that the Government should receive only actual money, and that it should hold such money in strong places of its own, paying out actual money to its creditors.

This system proved untenable at the opening of the Civil War, when a paper currency issue had become necessary. Not only did the sub-treasuries have to receive the Government legal tender notes, but they shortly came to receive national bank notes, and to make disbursement not only in cash but in paper. Moreover, during the Civil War it was necessary to make large use of banking machinery, and the system was soon developed of making deposits in banks with special protection in the form of Government

bonds deposited with the Treasury of the United States. That is to say, if the Government needed to deposit funds in banks in order to obtain banking facilities in transmitting money, or for any other purpose, it was with the understanding that the bank receiving such funds would place an equal amount in Government bonds with the Treasury of the United States in trust. Then if the depository bank failed, the Government was protected because it held an equal amount in its own bonds. The independent Treasury plan as thus modified was never satisfactory, but it was possible to operate it without serious suffering during the twenty years after the close of the Civil War. At the expiration of that length of time, however, new conditions had developed. It was found that very large sums of money tended to accumulate in the Treasury because the system of taxation produced much more income than the Government was disposed at that time to expend. The alternative was thus presented of either keeping the actual cash in the vaults of the Treasury inactive, or else of placing it more or less permanently on deposit with the banks. It was, of course, possible to use some portion of the funds in reducing public indebtedness by

purchase; but the efforts that were made in this direction during the years 1880-1890 tended to raise the premium on Government bonds to an abnormal figure, so that it was soon seen that there was a very easily reached limit to such operations. It was, moreover, early recognized that as the national banks became more numerous and consequently required more and more bonds as a condition of their organization and to protect their currency, and as the Government's surplus deposited in banks became larger and larger, thus requiring more and more Government bonds deposited in trust to protect it, there might be a time when the available supply of Government bonds would be exhausted, and when, consequently, neither expansion of bank notes nor enlargement of public deposits in the banks would be feasible. The period of deficit financiering after 1890, due to the well-known legislation of that year, removed all further trouble originating with the Treasury surplus, and it was not until later years of the decade of 1890-1900 that the difficulty again became serious. After 1900 a large surplus again developed, and as in former years it was necessary to dispose of it by depositing it in the banks. The withdrawal of so much money from circu-

lation naturally had a tendency to reduce the available funds in the possession of the country, and to limit bank accommodation by a corresponding amount. In pursuance of the effort to distribute the surplus funds of the Government as widely as possible the number of depository banks was very greatly increased, rising at one time—about 1904—to something like 1,400. The deposits were distributed without much regard to the legitimate claims of business, and largely upon the basis of sectional or other favoritism. When the panic of 1907 came on the surplus funds of the Government were very widely diffused; and so great a quantity of bonds had been absorbed in order to protect these bank deposits that the immediate expansion of the national bank note currency to meet the needs of the sudden stringency was very difficult. This experience emphasized the defects of the Independent Treasury System, and gave point to the belief expressed by students of the situation for many years past that there should be an entire change in this method of handling public funds.

The harm of the Independent Treasury plan is twofold: the system is not wise or economical, and does not make use of well known modern

methods in handling funds; it, furthermore, is injurious to the financial structure of the country, and at times interferes seriously with the ordinary operations of business and finance.

The second of these considerations may be discussed first. When the taxpayers make payment to the Government the result is ultimately to transfer to the Treasury an equivalent amount of actual money. This money, of course, might come out of the cash which is in circulation in the pockets of the people; but inasmuch as under given circumstances the amount needed for circulation purposes is practically fixed, the funds really come out of the vaults of the banks, and, in a corresponding degree, reduce the stock of money in the banks. By reducing the bank reserves, such payments to the Government consequently reduce the supply of loanable funds because they limit the power of the banks to lend to their customers in exactly the proportion that the reserves required of the banks bear to their outstanding obligations. Thus, for example, if at any given time a bank has outstanding, say, \$6 or \$7 of liabilities for every \$1 that it has in its vaults, the withdrawal of \$1 from the vaults means the possible cancellation of \$6 or \$7 in credits. The withdrawal of

\$100,000,000 from the vaults of the banks and its payment to the Government in cash means that \$600,000,000 or \$700,000,000 of possible lending power has been taken from the bank. When the surplus reaches very large sums, therefore, it may operate to reduce the stock of cash available for bank reserves in a very material degree. The surplus has sometimes for long periods run from \$200,000,000 to \$250,000,000. To place so great a sum in the vaults of the Government has precisely the same effect as if an individual had hoarded it. Even if the country, recognizing the probability of such withdrawal, provided itself with the money it needed from abroad, it nevertheless loses the interest on the sums so tied up in the vaults of the Government. The trouble is, however, that the public could not anticipate, as a rule, such a withdrawal. It could not predict with accuracy the conditions under which a surplus or a deficit would be created. Frequently, indeed usually, the withdrawal takes place at the very time when the need of money for the purpose of supporting bank loans is greatest.

The Government revenues, moreover, are largest under prosperous conditions, as a rule; and prosperity usually co-exists with severe demands



on the banks for loans for the maintenance of business. The Treasury System is thus entirely out of harmony with business needs.

The converse of this proposition, moreover, is equally true. If the Government, recognizing the difficulties of the case, and knowing that harm is practically certain to result from the withdrawal of funds in large amounts, seeks to relieve the situation by redepositing such funds, it could even then seldom overcome the harm done by withdrawal. To select banks as depositories in such a way as to redeposit the funds in practically the same manner in which they were originally withdrawn would be nearly out of the question; and the result of the distribution of funds on any other principle is likely to cause harm. For example, if \$50,000,000 of excess revenue were taken in at the port of New York for customs duties and were then deposited in, say, fifty banks in the Middle West, the effect would be to withdraw the money at those points where it was needed by business and to place it at other points where it might or might not be needed. The same situation exists in internal revenue. If, for example, \$25,000,000 of whiskey taxes is received at Peoria, Illinois, and not being needed

for immediate disbursement, is deposited in banks on the Pacific Coast, the same injurious result would be produced as in the former instance. It might be said that the difficulty would be overcome if the funds were redeposited at the same places at which they were withdrawn, namely, in our illustration, at New York and Peoria. This is only partially true; but as a matter of fact the Government system of depositing funds in banks has never been satisfactory under any administration, and has never met the needs of the business world. The irregular withdrawal and redepositing of surpluses has been one of the most injurious financial factors with which the country has had to contend.

It has already been stated that another consideration against the Independent Treasury System was that it failed to give the Government the advantage of up-to-date and economical methods of banking and transfer of funds. Under the Independent Treasury System such banking methods have been supplied only in a very limited and unsatisfactory degree. The sub-treasuries have exercised some banking functions, transferring money by telegraph, and otherwise avoiding shipments of coin.

Banks have been made use of, under restrictions against losses, as checking agents. In the main, however, the effort of the Government has been to avoid the payment and receipt of funds through regular banking channels, and to do as much of its work as it could through its own machinery in the various sub-treasuries. Although these treasuries have been permitted to become members of local clearing-houses, so that they could collect checks on banks, and although individual taxpayers have been permitted to make payments in certified checks on banks and otherwise, the practice has always been exceedingly slow, uncertain and unsatisfactory, largely owing to the fact that the sub-treasuries were not banks, had no regular banking connections, and could not, in the nature of the case, do the work of the banks.

In foreign countries the case is quite different. There the banking institutions which act as agents for their respective governments are often collectors of taxes, receiving payment in ordinary bank checks, carrying them to the Government's credit, and in the same way making payments for the Government in their own funds, the balances of the Government being carried on the books of the banks like any others,

and, consequently, not operating to interfere at all with the general use of the banks' resources by the business world. The service thus rendered by foreign banks has at all times been useful and economical; but its value has been more evident on those occasions when large accommodations were needed by foreign governments. On such occasions loans have been obtained either directly from such banks, or, through their agencies, from individuals and corporations. The United States has had no such resources, but has been obliged to rely upon the sale of bonds by general subscription, a plan which works sufficiently well when conditions are undisturbed, but which is in grave danger of breaking down at any time of stress or difficulty when the public at large is doubtful of the future or suffering curtailment of its income. At times of difficulty, therefore, it is necessary to have the assistance of some responsible institution whose direct duty it is to act from a public and patriotic standpoint, for the purpose of insuring the stability and efficiency of the financial structure of the country. No bank organized as a purely private institution is likely to fulfil this function satisfactorily, even though it may be managed with a very

considerable degree of public spirit. Its first duty, after all, is to its customers and stockholders, and the managers of the institution must bear that fact constantly in mind in framing their policy. There have fortunately been but few occasions since the close of the Civil War when it was necessary for the Government to rely largely upon loans, or to make appeal to private institutions. On those few occasions, however, (the need of some more effective organization has been keenly felt, and this recognition of the necessities of the case has added to the general demand expressed by scientific students for the revision or abandonment of the Independent Treasury System, so as to introduce a plan of financial management that would be in harmony with modern practice.

The Federal Reserve Act, in view of the foregoing considerations, endeavors to effect two distinct changes in the existing relations between the Government and the reserve institutions:

- (1) It provides for the depositing of Government funds in Federal reserve banks, which are authorized to act as "fiscal agents," and
- (2) It authorizes Federal reserve banks to deal in Government securities.

This, in short, authorizes the Government to become a depositor at Federal reserve banks in common with the various member banks of the country, and through the provision that the reserve banks may trade in Government securities (while acting as fiscal agents) it practically enables the Government to resort to the banks for accommodation should it desire to do so. In one very special way an important relationship is established between the Government and the Federal reserve banks. Provision is made, as has been seen, in connection with our treatment of the currency question, for the gradual transfer, at a rate not exceeding \$25,000,000 per annum, of the national bonds now held by the national banks to the Federal reserve banks. The reason for introducing this provision is found in the fact that in order to introduce an improved currency situation it was necessary to deprive the national banks of their exclusive power of issuing notes based on Government bonds. This, of course, meant that in all equity the banks must, at some reasonable time, be relieved of their bonds at a fair figure. The Federal reserve banks, by taking over these bonds, gradually mass the securities in their own hands, and consequently relieve

their individual members who have disposed of their securities. Ultimately it may be assumed that the bonds will be refunded, or otherwise provided for by the Government of the United States upon some satisfactory basis.

Thus far Federal reserve banks have not been used as fiscal agents, and no arrangements have been made for initiating the transfer of funds. One reason for the postponement of such action has been that since the organization of the banks there has been little withdrawal of cash from circulation as a result of tax payments to the Government. The expenses of the Government have been more than equal to its incomes; and what has come in has gone out about as rapidly as it was paid in to the Treasury. Moreover, great ease of money and very large surplus reserves have been established throughout the country as a result of the reserve changes incident to the adoption of the Federal Reserve Act. Another reason for the postponement has been that the duty of acting as fiscal agent will entail considerable expense upon the reserve banks, and is a function that will require some detailed preparation. Altogether, therefore, it has been felt that no serious harm would result from postponement. It should be noted

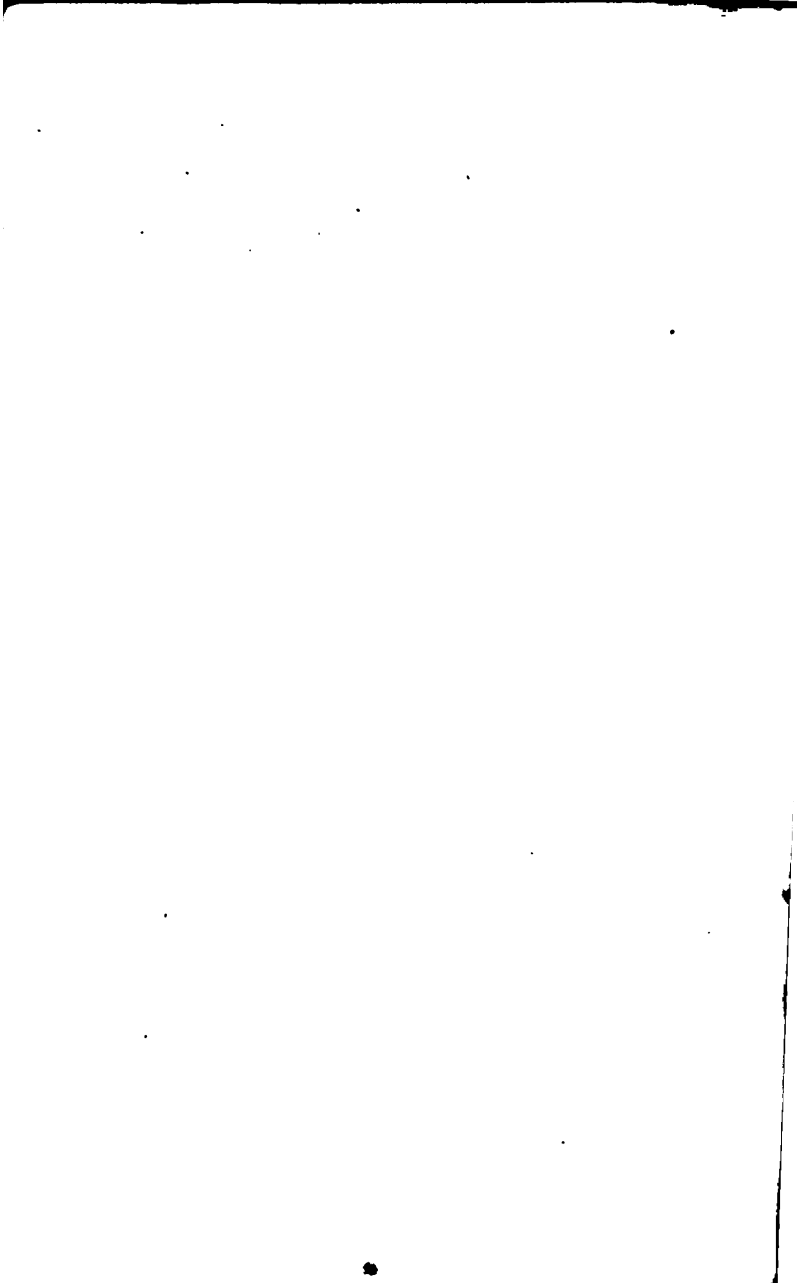
however, that the question how much public money should be deposited in reserve banks, and under what conditions, is a matter that is entirely within the discretion of the Secretary of the Treasury. He may do as he chooses, and may at his discretion either refrain from depositing funds in reserve banks at all, or use the reserve banks and the existing national banks as depositories jointly. By some this joint type of control is regarded as a defect in the Federal Reserve Act. It certainly is an important limitation upon the process of centralizing banking authority in the hands of the Federal Reserve Board. To some the existence of such a limitation may in itself seem a merit, while to others, and for very much the same reasons, it may appear to be a demerit. The fact remains that the Federal Reserve Act has provided what has long been urged, and has at times been most urgently needed—a means of keeping the funds of the Government available for banking uses, and of furnishing the Government itself with a mechanism for placing and receiving money which does not depend upon the available supply of Government bonds. Equally important with this is the fact that an efficient financial mechanism, under close Gov-



ernment supervision, and directly in close touch with the general banking system of the country, has been provided for the use of the Government in the event that any emergency requiring the placing of large loans in behalf of the public Treasury should present itself.

THE END

## APPENDIX



## APPENDIX

### *Digest of the Federal Reserve Act*

(Abbreviated from the summary of the Act published by the National Association of Credit Men, 41 Park Row, New York City. Reprinted here by courteous permission of Mr. J. H. Tregoe, Secretary of the National Association of Credit Men. The full text of the Act may be had gratis by application to the Librarian of Congress, Washington, D. C.)

#### PURPOSES OF THE ACT

To furnish an elastic currency.

To afford means of rediscounting commercial paper.

To establish a more effective supervision of banking in the United States.

#### BASIS OF THE ACT

A division of the continental United States exclusive of Alaska into not less than eight nor more than twelve reserve districts, following trade drifts and tendencies rather than state lines to be distinguished from one another by number; and the selection in each district of a city for the location of a Federal Reserve Bank. (Sec. 2.)

#### FEDERAL RESERVE BANKS

In each Federal Reserve District there is to be one Federal Reserve Bank located in the Federal reserve city of that district. The banks will be distinguished by the names of the Federal reserve cities, which shall

be a part of the official title. As an illustration, "The Federal Reserve Bank of Chicago." (Sec. 2.)

#### MEMBERSHIP AND STOCK OWNERSHIP

A. Every national bank in the continental United States except Alaska must be a member. (Sec. 2.)

(1) Refusal to join or to conform to the provisions of the Act will occasion the forfeiture of the charter of such bank upon action instituted by the Comptroller in a competent court of the United States. (Sec. 2.)

B. Any eligible bank in the United States, or trust company in the District of Columbia, upon equal privileges with national banks. (Sec. 2.)

(1) By conversion into a national bank. (Sec. 8.)

(2) By retaining state charters, but meeting the requirements imposed upon national banks by the National Banking Act in the following features:

Capital and reserve. (Sec. 9.)

Limit of liability for single borrower. (Sec. 9.)

Lending on or purchasing own stock. (Sec. 9.)

Impairment of capital. (Sec. 9.)

Payment of unearned dividends. (Sec. 9.)

Report of conditions. (Sec. 9.)

Liability of directors. (Sec. 9.)

Complying with regulations of Federal Reserve Board. (Sec. 9.)

C. The public. (Sec. 2.)

If the subscriptions of member banks fail to supply the minimum capital required upon conditions and limitations defined by the Act the public may subscribe. (Sec. 2.)

**D. The United States. (Sec. 2.)**

Should the subscriptions of member banks and the public fail to supply the minimum capital requirement, the United States shall subscribe. (Sec. 2.)

**CAPITAL AND SHARES**

The subscribed capital of each Federal Reserve Bank must be not less than \$4,000,000. (Sec. 2.)

Each member bank must subscribe to the stock of the Federal reserve bank of which it is a member, in an amount equal to 6 per cent. of its paid up capital and surplus. (Sec. 2.)

To be paid as follows:

One sixth payable on call of organization committee.

One sixth within three months thereafter.

One sixth in six months.

One half payable on call of Federal Reserve Board and if required. (Sec. 2.)

Payments of subscriptions to the stock of Federal Reserve Banks must be in gold or gold certificates. (Sec. 2.)

Any individual, corporation, or partnership, if permitted to subscribe under the provisions of the Act, to the stock of a Federal Reserve Bank, cannot do so in an amount exceeding \$25,000. (Sec. 2.)

The capital stock of each Federal Reserve Bank is divided into shares of \$100 each. (Sec. 5.)

Shares owned by member banks cannot be transferred or hypothecated except as regulated by the Act. (Sec. 5.)

Shares owned by the public or the United States are transferable under certain regulations. (Sec. 2.)

Shares owned by member banks have voting power. (Sec. 4.)

Shares owned by the public or the United States have not voting power. (Sec. 2.)

The capital stock of Federal Reserve Banks will be increased as new member banks are added, or the capital of member banks is increased; or decreased as member banks retire, the capital of member banks is decreased or member banks are liquidated. (Sec. 5.)

On November 16th member banks had subscribed as follows to the capital stock of the twelve Federal Reserve Banks:

#### CONTROL AND SUPERVISION

Each of the Federal Reserve Banks shall be conducted under the supervision and control of a Board of Directors. (Sec. 4.)

Such board shall perform the duties usually appertaining to the office of directors of banking associations and all duties prescribed by the law, impartially and without discrimination in favor of any member bank, and subject in many features of their control to the orders of the Federal Reserve Board. (Sec. 4.)

The board of each Federal Reserve Bank shall consist of nine members, divided into three classes of three members each, designated as classes "A," "B" and "C." (Sec. 4.)

*Class "A" Directors:* Shall be chosen by and represent the member banks; none shall be a member of Congress. (Sec. 4.)

*Class "B" Directors:* Shall be chosen by the member banks, and at time of election shall be actively engaged in commerce, agriculture, or other industrial pursuit in their district; none shall be a member of Congress, an officer, director, or employee of any other bank. (Sec. 4.)

*Class "C" Directors:* Shall be appointed by the Federal Reserve Board, and must have been, for

two years at least, residents of the district for which they are appointed; none shall be a member of Congress, or an officer, director, employee, or shareholder of any other bank. (Sec. 4.)

*Officers:* Two of the Class "C" directors must be of tested banking experience, one of whom shall be designated by the Federal Reserve Board as chairman of the Board of Directors and Federal reserve agent, and the second as deputy chairman and deputy Federal reserve agent. (Sec. 4.)

#### ELECTION OF DIRECTORS

*Classes "A" and "B":* The member banks are to be divided into three groups, each group to consist as nearly as may be of one third of the aggregate number of member banks of similar capitalization. (Sec. 4.)

An elector is chosen by the directors of each member bank and choice made in each class by the ballots of these electors. (Sec. 4.)

Each group will therefore have a representative in Class "A" and a choice in Class "B."

#### FEDERAL RESERVE BOARD

Consisting of seven members, five appointed by the President of the United States with the advice and consent of the Senate, and the Secretary of the Treasury and the Comptroller of the Currency. (Sec. 10.)

Of the five appointed members not more than one shall be a resident of any one of the Federal Reserve Districts, and except the first appointees, for which special provision is made by the Act, are to serve for a term of ten years. (Sec. 10.)

The five appointed members are to give their entire time to the business of the Board, and to receive a salary of \$12,000 per annum, and actual and necessary travelling expenses. (Sec. 10.)

The Comptroller of the Currency is to receive, in



addition to his salary as Comptroller, \$7,000 annually for services as a member of the Board. (Sec. 10.)

No member of the Federal Reserve Board may be an officer, director, employee, or shareholder in any banking institution or trust company, nor during his term of office or for two years thereafter be eligible for any office or employment in a member bank. (Sec. 10.)

The Secretary of the Treasury shall be ex-officio chairman of the Board; two of the appointed members must be of tested banking experience, one of whom shall be designated governor and the other vice-governor of the Federal Reserve Board. (Sec. 2.)

#### POWERS AND DUTIES OF THE FEDERAL RESERVE BOARD

(See chapter on The Federal Reserve Board)

#### ADVISORY COUNCIL

Composed of as many members as there are Federal Reserve Districts, each district to have one representative upon the council. (Sec. 12.)

The directors of each Federal Reserve Bank elects its representative upon the advisory council, who is to receive a salary fixed by the board electing him, subject to the approval of the Federal Reserve Board. (Sec. 12.)

Shall elect its own officers, and transact business by quorum, that is a majority. (Sec. 12.)

Will meet in Washington, D. C., at least four times a year, and may meet elsewhere. (Sec. 12.)

#### ADVISORY COUNCIL FUNCTIONS

To confer with the Federal Reserve Board on general business conditions, to call for information, to make recommendations in regard to discount rates and rediscount business, note issues, reserve conditions, purchase and sale of gold or securities by

Federal Reserve Banks, open market operations, and the general affairs of the system, to make verbal or written representations concerning matters within the jurisdiction of the Federal Reserve Board.

#### **FUNCTIONS AND OPERATIONS OF FEDERAL RESERVE BANKS—DEPOSITORIES**

Any Federal Reserve Bank may receive deposits from its member banks, the United States, or from other Federal Reserve Banks solely for exchange purposes. (Secs. 13 and 15.)

Federal Reserve Banks may receive from member banks deposits of lawful money, bank notes, Federal reserve notes, checks, and sight drafts against solvent member banks in its own or other reserve districts. (Sec. 13.)

Or may receive from Federal Reserve Banks deposits of lawful money, bank notes, checks, and drafts against its member banks or against other Federal Reserve Banks. (Sec. 13.)

The general funds of the United States Treasury may, at the discretion of the Secretary of the Treasury, be deposited in the Federal Reserve Banks, except the redemption funds held against outstanding bank notes and Federal reserve notes. (Sec. 15.)

The Federal Reserve Banks, when requested, shall act as the fiscal agents of the United States, receiving deposits, paying checks drawn against such deposits. (Sec. 15.)

The Secretary of the Treasury may still use member banks as depositories, but not non-member banks. (Sec. 15.)

#### **DISCOUNTING POWERS**

The Federal Reserve Banks may discount for member banks upon endorsement and waiver of demand notice and protest, notes, drafts, and bills of exchange arising out of commercial, agricultural, or

industrial transactions, the proceeds of which have been or are to be used for such purposes. (Sec. 13.)

Commercial paper to be eligible under this section of the Act must be of a self-liquidating character, that is, must mature not longer than ninety days from time of discount, except when the paper is drawn or issued for agricultural purposes, or based on live stock, in which cases it may have a maturity not to exceed six months from time of discount. (Sec. 13.)

The amount of six months paper eligible for discount by any one Federal Reserve Bank shall be limited to a percentage of the capital of the discounting bank as may be fixed by the Federal Reserve Board. (Sec. 13.)

Paper arising from trading in stocks, bonds, and investment securities is not eligible for discount except when drawn for the purpose of trading in the bonds and notes of the Government. (Sec. 13.)

Paper having the endorsement of non-member banks may not be rediscounted by a Federal Reserve Bank except with the permission of the Federal Reserve Board. (Sec. 13.)

The aggregate of eligible paper bearing the signature or endorsement of any one person, firm, or corporation, rediscounted for any one member bank, shall at no time exceed 10 per cent. of the unimpaired capital and surplus of such bank, except in the case of bills of exchange drawn in good faith against actually existing values. (Sec. 13.)

Acceptances based on the importation and exportation of goods and which have a maturity of not longer than three months may be discounted by Federal Reserve Banks, but the amount of such discounted acceptances shall at no time exceed one half of the paid-up capital stock and surplus of the member bank for which the discount is made. (Sec. 13.)

A member bank may accept drafts and bills of

*Since 1913  
7 months under 8  
90 days*

exchange drawn upon it in transactions involving the import and export of merchandise and to an amount not to exceed at any time more than one half of its paid-up capital and surplus, and having not more than six months' sight to run. (Sec. 13.)

These provisions of the Act shall be subject to such restrictions, limitations, and regulations as may be imposed by the Federal Reserve Board. (Sec. 13.)

#### OPEN-MARKET OPERATIONS

Solely under rules and regulations prescribed by the Federal Reserve Board, Federal Reserve Banks may purchase and sell, at home or abroad, from and to banks, corporations, firms, or individuals, cable transfers and bankers' acceptances, and bills of exchange of the kinds and maturities made eligible for rediscount by the Act, with or without the endorsement of a member bank. (Sec. 14.)

Federal Reserve Banks may buy and sell, at home and abroad, bonds and notes of the United States, bills, notes, and revenue warrants of states, counties, and municipalities, of a maturity not exceeding six months from time of purchase. (Sec. 14.)

They may deal in gold bullion at home and abroad, make loans thereon, exchange Federal reserve notes for gold, gold coin, or gold certificates, and contract for loans of gold coin or bullion, giving therefor, when necessary, acceptable securities. (Sec. 14.)

They may purchase from member banks and sell, with or without their endorsement, bills of exchange arising out of commercial transactions, as defined by the Act. (Sec. 14.)

They may establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged for each class of paper, fixed with a view to accommodating commerce and business. (Sec. 14.)

*Foreign  
banks acceptances  
gold coin & bullion*

They may establish accounts with other Federal Reserve Banks for exchange purposes with the consent of the Federal Reserve Board. (Sec. 14.)

They may open and maintain banking accounts in foreign countries and establish agencies in such countries for the purpose of purchasing, collecting, and selling bills of exchange, and buy and sell, with or without its endorsement through such correspondents or agencies, bills of exchange arising out of commercial transactions which have not more than ninety days to run and bear the signature of two or more responsible parties. (Sec. 14.)

#### FEDERAL RESERVE NOTES

Are authorized and may be issued by the Federal Reserve Board for the purpose of making advances to Federal Reserve Banks. (Sec. 16.)

These notes are the obligation of the United States and redeemable in gold on demand at the Treasury of the United States, and in gold or lawful money at any of the Federal Reserve Banks. (Sec. 16.)

They are receivable by member and Federal Reserve Banks, for all taxes, customs, and public dues. (Sec. 16.)

They are to be issued through the Federal Reserve Agent to the Federal Reserve Bank which is the custodian of the collateral against which they are issued. (Sec. 16.)

The collateral is notes, bills of exchange, and acceptances discounted by a Federal Reserve Bank. (Sec. 16.)

A reserve against Federal note issues is required of Federal Reserve Banks of 40 per cent., in gold, of which 5 per cent. is to be deposited with the Secretary of the Treasury of the United States as a redemption fund against such notes as may be presented to the Treasury for redemption. A reserve against deposits is required of each Federal Reserve

Bank of 35 per cent. in gold or lawful money. (Sec. 16.)

To insure the quick retirement and elasticity of the notes it is provided by the Act that the number of the Federal Reserve Banks issuing them will be placed upon the notes, and when redeemed at the Treasury of the United States or at some other Federal Reserve Bank than the one issuing them, they are to be sent to the issuing bank for redemption or credit, and cannot be reissued by any other Federal Reserve Bank. (Sec. 16.)

A penalty of a tax of 10 per cent. upon the face value of the notes will be incurred by any Federal Reserve Bank which reissues other than its own Federal reserve notes. (Sec. 16.)

The Federal Reserve Board may at any time call upon the Federal Reserve Bank for additional security to protect Federal reserve notes issued to it. (Sec. 16.)

Federal reserve notes are to be in denominations of \$5, \$10, \$20, \$50, and \$100, as may be required to supply the Federal Reserve Banks. (Sec. 16.)

Federal Reserve Banks may redeem their liability for notes and change collateral for same through the Federal Reserve Agent, subject to regulations prescribed by the Federal Reserve Board. The agent must report daily to the Federal Reserve Board issuance or withdrawal of Federal reserve notes. (Sec. 16.)

Federal reserve notes are to be printed under the direction and control of the Comptroller of the Currency and the Secretary of the Treasury, and when printed, deposited in the Treasury or other depositories provided by the Act, and to be used as drawn upon for circulation. (Sec. 16.)

#### CLEARANCE OPERATIONS

Federal Reserve Banks shall receive on deposit at par, from member banks and other Federal Re-

serve Banks, checks and drafts upon any of its depositories, and (Sec. 16.)

When remitted by a Federal Reserve Bank, checks and drafts drawn by the depositors in any other Federal Reserve Bank or member bank upon funds to the credit of said depositor in said reserve bank or member bank. (Sec. 16.)

Member banks may charge for actual expenses in collecting and remitting funds and for exchange sold to depositors. (Sec. 16.)

The Federal Reserve Board shall fix the charge that may be made by member banks for clearing through Federal Reserve Banks and for the clearing and collection service rendered by all Federal Reserve Banks. (Sec. 16.)

Funds shall be transferred between Federal Reserve Banks and charges made for same under regulations promulgated by the Federal Reserve Board. (Sec. 16.)

The Federal Reserve Board may act as a clearing-house for Federal Reserve Banks or may require a Federal reserve to exercise such functions, and may also require each such bank to exercise the function of a clearing-house for its member banks. (Sec. 16.)

#### BRANCH OFFICES

Each Federal Reserve Bank shall establish branch banks in its district or in the district of a Federal Reserve Bank that may have been suspended. (Sec. 3.)

The branch offices are to be operated under the control of seven directors, four of whom are to be designated by the Federal Reserve Bank, and three by the Federal Reserve Board. (Sec. 3.)

The directors of the branch offices shall possess the same qualifications as directors of the Federal Reserve Banks, and one is to be designated as manager by the Federal Reserve Bank. (Sec. 3.)

The directors of branch offices are to hold office during the pleasure, respectively, of the parent bank and the Federal Reserve Board, and their operations and control shall be under rules and regulations approved by the Federal Reserve Board. (Sec. 3.)

#### DIVISION OF EARNINGS

Shareholders in Federal Reserve Banks are to receive 6 per cent. annual dividend on paid-up stock from the earnings, which dividend is to be cumulative. (Sec. 7.)

After the payment of this dividend what remains of the net earnings shall be divided equally between the United States and a surplus fund until this fund shall have amounted to ~~4~~ 6 per cent. of the paid-in capital stock, and when this occurs all of the net earnings above the dividend rate of 6 per cent. will go to the United States. (Sec. 7.)

The portion derived by the United States from this division of the net earnings shall be used at the discretion of the Secretary of the Treasury to supplement the gold reserve held against outstanding United States notes or for a reduction of the outstanding bonded indebtedness of the United States. (Sec. 7.)

In the event of the dissolution of a Federal Reserve Bank or its liquidation after the payment of all debts and dividend requirements of the capital stock, any surplus shall become the property of the United States, and be applied according to the provisions of the Act. (Sec. 7.)

Federal Reserve Banks, including the capital stock and surplus therein and the income derived therefrom, shall be exempt from Federal, state, and local taxation except taxes upon real estate. (Sec. 7.)

#### REFUNDING BONDS TO SECURE BANK CIRCULATION

Any member bank after two years from the passage of this Act, and not later than twenty years,



may file with the Treasurer of the United States an application to sell for its account at par and interest United States bonds securing circulation to be retired. (Sec. 18.)

The Federal Reserve Board is to be notified quarterly of such applications and may require Federal Reserve Banks to buy such bonds by allotment, but in an amount not to exceed \$25,000,000 of such bonds in any one year. (Sec. 18.)

When purchased the Federal Reserve Banks may take out circulation equal to the par value of the bonds so purchased. (Sec. 18.)

Bonds acquired by Federal Reserve Banks against which there is no circulation may, upon application to the Federal Reserve Bank, approved by the Federal Reserve Board, exchange them not to exceed 5 per cent. in any one year for one year 3 per cent. gold notes without circulation privilege, which notes may be renewed by the Secretary of the Treasury each year for a period of thirty years. (Sec. 18.)

#### BANK RESERVES

A member bank not in a reserve or central reserve city shall hold and maintain reserves equal to 12 per centum of the aggregate amount of its \*demand deposits and 5 per centum of its \*time deposits, as follows:

In its vaults for a period of thirty-six months after the establishment of a Federal Reserve Bank in its district, five twelfths thereof and permanently thereafter four twelfths.

In the Federal Reserve Bank of its district, for a period of twelve months after the same date, two

---

\*Demand deposits within the meaning of the Act shall comprise all deposits payable within thirty days, and time deposits shall comprise all deposits payable after thirty days, and all savings accounts and certificates of deposit which are subject to no less than thirty days' notice before payment.

twelfths, and for each succeeding six months an additional one twelfth, until five twelfths have been so deposited, which shall be the amount permanently required.

For a period of thirty-six months after same date the balance of the reserves may be held in its own vaults, or in the Federal Reserve Bank, or in national banks in reserve or central reserve cities as now defined by law.

After said thirty-six months' period said reserves, other than those hereinbefore required to be held in the vaults of the member bank and in the Federal Reserve Bank, shall be held in the vaults of the member bank or in the Federal Reserve Bank, or in both, at the option of the member bank.

#### BANKS IN RESERVE CITIES

A bank in a reserve city, as now or hereafter defined, shall hold and maintain reserves equal to 15 per centum of the aggregate amount of its demand deposits and 5 per centum of its time deposits, as follows:

In its vaults for a period of thirty-six months after date, referred to above, six fifteenths thereof and permanently thereafter five fifteenths.

In the Federal Reserve Bank of its district for a period of twelve months after the date aforesaid at least three fifteenths, and for each succeeding six months an additional one fifteenth, until six fifteenths have been so deposited, which shall be the amount permanently required.

For a period of thirty-six months after said date the balance of the reserves may be held in its own vaults, or in the Federal Reserve Bank, or in national banks in reserve or central reserve cities as now defined by law.

After said thirty-six months' period all of said reserves, except those hereinbefore required to be

held permanently in the vaults of the member bank and in the Federal Reserve Bank, shall be held in its vaults or in the Federal Reserve Bank, or in both, at the option of the member bank.

#### BANKS IN CENTRAL RESERVE CITIES

A bank in a central reserve city, as now or hereafter defined, shall hold and maintain a reserve equal to 18 per centum of the aggregate amount of its demand deposits and 5 per centum of its time deposits, as follows:

In its vaults six eighteenths thereof.

In the Federal Reserve Bank seven eighteenths.

The balance of said reserves shall be held in its own vaults or in the Federal Reserve Bank at its option.

Any Federal Reserve Bank may receive from the member banks as reserves, not exceeding one half of each instalment, eligible paper, as described in section fourteen (previously cited) properly indorsed and acceptable to the said reserve bank.

#### EXAMINATIONS

Each member bank is to be examined at least twice each year by appointees of the Comptroller of the Currency. (Sec. 21.)

State bank members may be examined by the state authorities upon approval of the Federal Reserve Agent or Federal Reserve Board. (Sec. 21.)

Federal Reserve Banks shall furnish information when required by the Federal Reserve Board upon member banks. (Sec. 21.)

Federal Reserve Banks are to be examined at least once each year by the Federal Reserve Board, and may be especially examined. (Sec. 21.)

Examiners are not to receive gratuities from member banks or to disclose information derived in their examinations, except as provided by the Act, under penalty. (Sec. 22.)

## LIABILITIES OF SHAREHOLDERS

Shareholders in Federal Reserve Banks are individually responsible for the contracts, debts and engagements of the bank in an amount equal to the par value of their share holdings. (Sec. 23.)

## FOREIGN BRANCHES

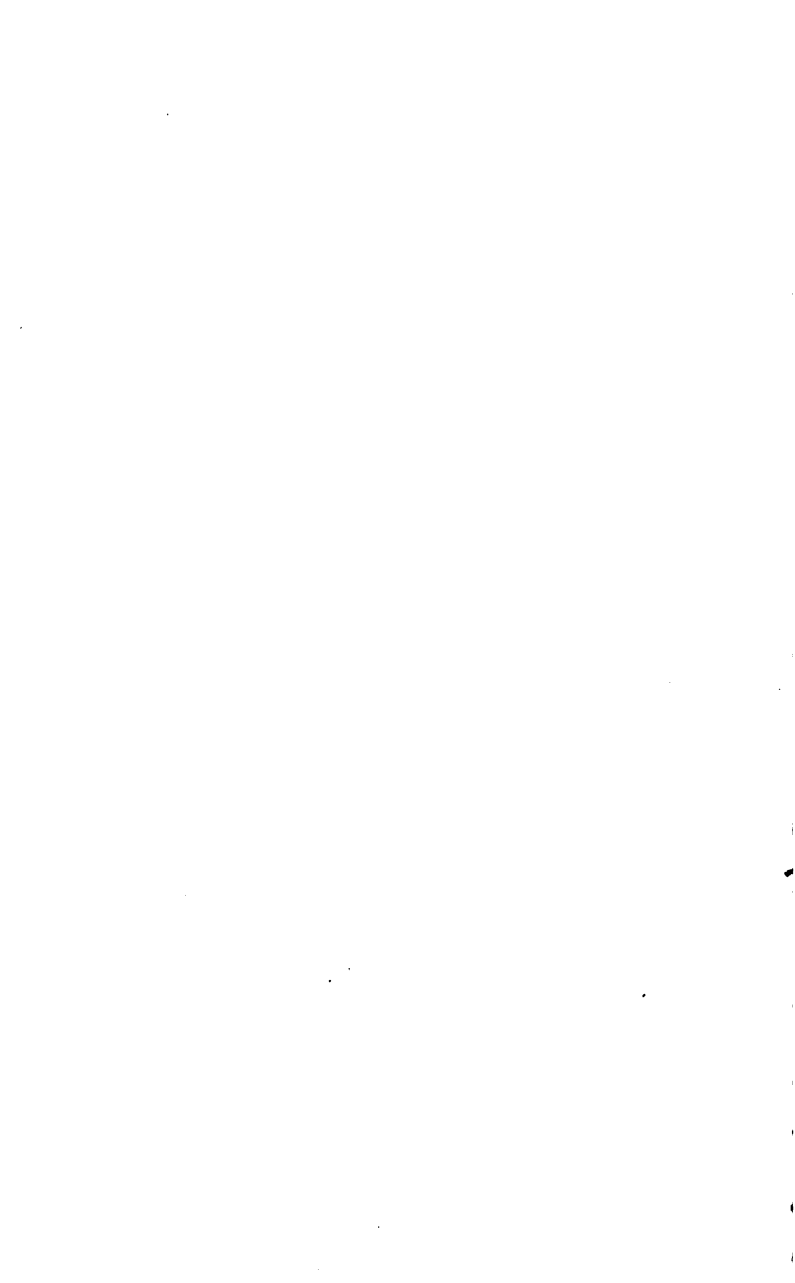
Any member bank with a capital and surplus of at least \$1,000,000 may, upon conditions prescribed by the Federal Reserve Board and with its permission, establish branches in foreign countries or dependencies of the United States for the furtherance of the commerce of the United States, or to act as the fiscal agent of the United States in such countries. (Sec. 25.)

Edge  
Act.

## FARM LAND LOANS

Any member bank other than in the central reserve city may loan on improved or unencumbered real estate in its district for a period not to exceed five years and in an amount not to exceed one half of the actual value of the land. The aggregate of such loans must not exceed one quarter of the capital and surplus, or one third of the time deposits of such loaning bank. (Sec. 24.)

The Federal Reserve Board shall have power from time to time to add to the list of cities in which national banks shall not be permitted to make loans upon real estate in the manner and upon the conditions prescribed. (Sec. 24.)



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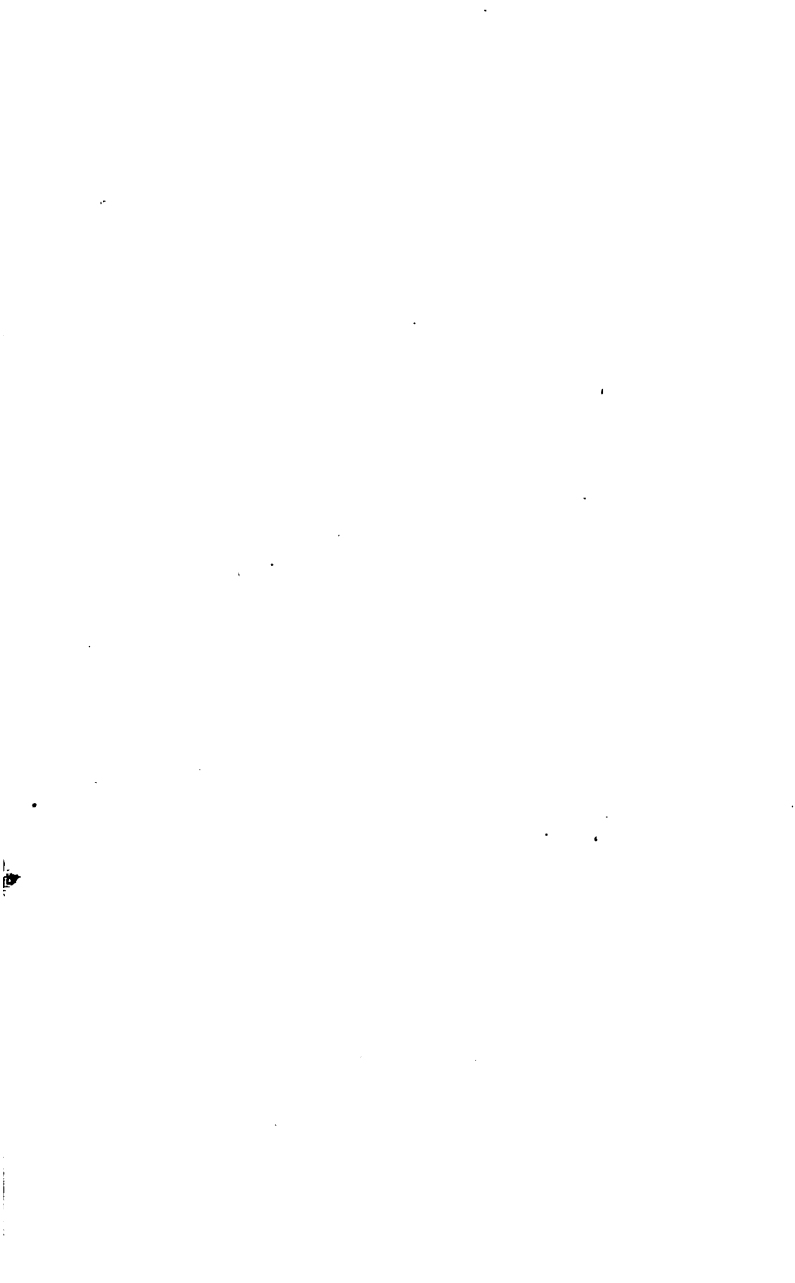
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